

SEARCH REQUEST FORM**Scientific and Technical Information Center**

Requester's Full Name: Pratt, Helen Examiner #: 66036 Date: 6-23-03
Art Unit: 1761 Phone Number 308-1978 Serial Number: 09889743
Mail Box and Bldg/Room Location: 5B36 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Psychological Food Salt product
Inventors (please provide full names): Juhani Maki

Earliest Priority Filing Date: Jan. 12, 2000

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search the independent claims.

STAFF USE ONLY		Type of Search	Vendors and cost where applicable
Searcher: <u>EL</u>	NA Sequence (#)	STN	<u>\$184.71</u>
Searcher Phone #:	AA Sequence (#)	Dialog	<u>\$73.38</u>
Searcher Location:	Structure (#)	Questel/Orbit	
Date Searcher Picked Up:	Bibliographic <input checked="" type="checkbox"/>	Dr.Link	
Date Completed: <u>6-24-03</u>	Litigation	Lexis/Nexis	
Searcher Prep & Review Time: <u>10</u>	Fulltext	Sequence Systems	
Clerical Prep Time:	Patent Family	WWW/Internet	
Online Time: <u>125</u>	Other	Other (specify)	

1. A physiological food salt product containing an alkaline earth metal component, **characterized** in that said product contains one or more hydrate forms of magnesium ammonium chloride and/or calcium ammonium chloride having the general formula $MNH_4Cl_3 \times XH_2O$, in which formula M is Mg or Ca and X is the number of molecules of water of crystallization.
2. The product according to claim 1, **characterized** in that X is within the range from 4 to 6.
- ~~3. The product according to claim 1 or 2, **characterized** in that the magnesium ammonium chloride and/or the calcium ammonium chloride is in a complex form.~~
4. The product according to claim 3, **characterized** in that the complexing compound is a hydroxy-carboxylic acid and/or its salt, or an amino acid and/or its derivative.
- ~~5. The product according to claim 1 or 2, **characterized** in that the general anhydrous formula of the salt contained in the product is $aMg \times bCa \times NH_4Cl_3$, in which $a + b = 1$, and a and b are greater than 0, and in which part of the ammonium can be replaced with potassium.~~
6. The product according to claim 1 or 2, **characterized** in that the general anhydrous formula of the salt contained in the product is in the type $MgNH_4Cl_3 \times eCaCl_2$, in which e is preferably not greater than 0.2 and in which part of the ammonium can be replaced with potassium.
7. The product according to claim 1 or 2.

10/1/61

9. The product according to claim 8, **characterized** in that the content of magnesium ammonium chloride in the mixture is at least 2.5 wt-%, preferably at least 3.0 wt-%, calculated as magnesium.

10. The product according to any of the preceding claims, **characterized** in that it contains materials which are advantageous to vital functions, such as micronutrients, vitamins, flavonoids, steroids, or the like.

11. The product according to any of the preceding claims, **characterized** in that it contains as additives affecting primarily the taste of the product carbohydrates or their polymeric forms, spices, herbs, acidity regulators, glutamates, proteins, protein hydrolysates, or the like.

12. A nutrient substance, a semi-finished product, a processed food product, a food portion, or the like, **characterized** in that a food salt product according to any of the preceding claims has been used, in solid form or in a solution, in its processing and/or preservation.

13. A method for preparing a food salt product containing an alkaline earth metal component, **characterized** in that an alkaline earth metal chloride and ammonium chloride are brought together in a solution *aqueous soln.* wherein a precipitate is formed which contains one or several hydrate forms of an alkaline earth metal ammonium chloride, having the general formula of $MNH_4Cl_3 \times XH_2O$, in which formula M is Mg or Ca and X is the number of molecules of water of crystallization, and the obtained precipitate is separated from the mother liquor.

14. The method according to claim 13, **characterized** in that the precipitation is performed in a continuous process, returning the mother liquor after the separation of the precipitate to the stage in which it is supplemented with the alkaline earth metal chloride and ammonium chloride.

15. The method according to claim 13, **characterized** in that the solution form contains both magnesium chloride and calcium chloride to include calcium in the product.

=> file reg

FILE 'REGISTRY' ENTERED AT 10:18:32 ON 24 JUN 2003

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=> display history full l1-

FILE 'REGISTRY' ENTERED AT 09:18:05 ON 24 JUN 2003

L1 E AMMONIUM MAGNESIUM CHLORIDE/CN
1 SEA "AMMONIUM MAGNESIUM CHLORIDE (NH4MGCL3) HEXAHYDRATE"/CN

L2 1 SEA "AMMONIUM MAGNESIUM CHLORIDE (NH4MGCL3.6H2O)"/CN
E CALCIUM AMMONIUM CHLORIDE/CN
E AMMONIUM CALCIUM CHLORIDE/CN

L3 7 SEA ("AMMONIUM CALCIUM CHLORIDE"/CN OR "AMMONIUM CALCIUM
CHLORIDE ((NH4)2CA3CL8)"/CN OR "AMMONIUM CALCIUM
CHLORIDE ((NH4)2CACL4)"/CN OR "AMMONIUM CALCIUM CHLORIDE
((NH4)3CA2CL7)"/CN OR "AMMONIUM CALCIUM CHLORIDE
((NH4)3CACL5)"/CN OR "AMMONIUM CALCIUM CHLORIDE ((NH4)4CA
CL6)"/CN OR "AMMONIUM CALCIUM CHLORIDE ((NH4)CACL3)"/CN)
E AMMONIUM MAGNESIUM CHLORIDE/CN

L4 5 SEA ("AMMONIUM MAGNESIUM CHLORIDE"/CN OR "AMMONIUM
MAGNESIUM CHLORIDE ((NH4)2MGCL4)"/CN OR "AMMONIUM
MAGNESIUM CHLORIDE ((NH4)3MGCL5)"/CN OR "AMMONIUM
MAGNESIUM CHLORIDE ((NH4)MGCL3)"/CN OR "AMMONIUM
MAGNESIUM CHLORIDE (NH4MG2CL5)"/CN)

FILE 'HCA' ENTERED AT 09:30:49 ON 24 JUN 2003

L5 6 SEA (L3/D OR L3/DP OR (AMMONIUM# OR NH4) (2A) (CALCIUM# OR
CA) (2A) (CHLORIDE# OR TRICHLORIDE#) OR CANH4CL3 OR
NH4CACL3) (3A) (HYDRAT? OR H2O)

L6 6 SEA (L3 OR (AMMONIUM# OR NH4) (2A) (CALCIUM# OR CA) (2A) (CHL
ORIDE# OR TRICHLORIDE#) OR CANH4CL3 OR NH4CACL3) (3A) (HYDR
AT? OR H2O)

L7 25 SEA L1 OR L2

L8 12 SEA (L4/D OR L4/DP OR (AMMONIUM# OR NH4) (2A) (MAGNESIUM#
OR MG) (2A) (CHLORIDE# OR TRICHLORIDE#) OR MGNH4CL3 OR
NH4MGCL3) (3A) (HYDRAT? OR H2O)

L9 12 SEA (L4 OR (AMMONIUM# OR NH4) (2A) (MAGNESIUM# OR MG) (2A) (C
HLORIDE# OR TRICHLORIDE#) OR MGNH4CL3 OR NH4MGCL3) (3A) (HY
DRAT? OR H2O)

L10 297773 SEA FOOD? OR BEVERAG?

L11 QUE 17/SC, SX

L12 0 SEA (L10 OR L11) AND (L5 OR L6 OR L7 OR L8 OR L9)

L13 0 SEA (L5 OR L6) AND (L7 OR L8 OR L9)

L14 36 SEA L5 OR L6 OR L7 OR L8 OR L9

FILE 'REGISTRY' ENTERED AT 09:56:49 ON 24 JUN 2003

E AMMONIUM CHLORIDE/CN

L15 1 SEA "AMMONIUM CHLORIDE"/CN
E MAGNESIUM CHLORIDE/CN
L16 1 SEA "MAGNESIUM CHLORIDE"/CN
E CALCIUM CHLORIDE/CN
L17 1 SEA "CALCIUM CHLORIDE"/CN

FILE 'HCA' ENTERED AT 10:08:51 ON 24 JUN 2003

L18 68484 SEA L15 OR AMMONIUM#(W)CHLORIDE# OR NH4CL
L19 125516 SEA L16 OR L17 OR (MAGNESIUM# OR CALCIUM#) (W) (CHLORIDE#
OR DICHLORIDE#) OR MGCL2 OR CACL2
L20 QUE HYDRAT? OR H2O OR AQ# OR AQUEOUS?
L21 2128 SEA L18 AND L19 AND L20
L22 27 SEA L21 AND L10
L23 60 SEA L21 AND L11
L24 15 SEA L22 AND L23
L25 12 SEA L22 NOT L24
L26 81 SEA (L14 OR L23) NOT (L24 OR L25)

=> file hca

FILE 'HCA' ENTERED AT 10:18:44 ON 24 JUN 2003
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=> d l24 1-15 cbib abs hitstr hitind

L24 ANSWER 1 OF 15 HCA COPYRIGHT 2003 ACS

133:119389 Physiological **food** salt product. Maki, Juhani Ilpo
Tapio (Finland). PCT Int. Appl. WO 2000044245 A1 20000803, 30 pp.
DESIGNATED STATES: W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR,
BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL,
PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT,
BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR,
IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English).
CODEN: PIXXD2. APPLICATION: WO 2000-FI18 20000112. PRIORITY: FI
1999-145 19990127.

AB The invention relates to a physiol. **food** salt product
which consists primarily of minerals and contains **hydrate**
forms of an alk. earth metal **ammonium chloride**
to control the taste, hygroscopic properties and physiol.
nutritional properties of the product. The invention also relates
to the use of the product.

IT **7786-30-3, Magnesium chloride,**
biological studies 10043-52-4D, Calcium
chloride, alk. earth metal hydrates
12125-02-9D, Ammonium chloride, alk.

earth metal **hydrates**
 (physiol. **food** salt product)

RN 7786-30-3 HCA
 CN Magnesium chloride (MgCl₂) (9CI) (CA INDEX NAME)

Cl-Mg-Cl

RN 10043-52-4 HCA
 CN Calcium chloride (CaCl₂) (9CI) (CA INDEX NAME)

Cl-Ca-Cl

RN 12125-02-9 HCA
 CN Ammonium chloride ((NH₄)Cl) (9CI) (CA INDEX NAME)

Cl-NH₄

IC ICM A23L001-237
 CC **17-6** (Food and Feed Chemistry)
 Section cross-reference(s): 78
 ST salt substitute alk earth **ammonium chloride**;
 magnesium calcium **ammonium chloride** salt
 substitute
 IT Carboxylic acids, biological studies
 (hydroxy; physiol. **food** salt product)
 IT Nutrients
 (micronutrients; physiol. **food** salt product)
 IT **Food** functional properties
 Herb
 Hygroscopicity
 Spices
 Taste
 (physiol. **food** salt product)
 IT Alkaline earth metals
 Carbohydrates, biological studies
 Flavonoids
 Mineral elements, biological studies
 Protein hydrolyzates
 Proteins, general, biological studies
 Steroids, biological studies
 Vitamins
 (physiol. **food** salt product)
 IT **Food**
 (processed; physiol. **food** salt product)
 IT Condiments
 (salt substitutes; physiol. **food** salt product)
 IT 56-86-0D, L-Glutamic acid, derivs., biological studies 1310-58-3,
 Potassium hydroxide, biological studies 1310-73-2, Sodium
 hydroxide, biological studies 1318-27-0D, Carnallite, derivs.

- 7447-40-7, Potassium chloride, biological studies 7647-14-5,
Sodium chloride, biological studies **7786-30-3**,
Magnesium chloride, biological studies
10043-52-4D, **Calcium chloride**, alk.
earth metal **hydrates 12125-02-9D**,
Ammonium chloride, alk. earth metal
hydrates 15681-05-7, Potassium magnesium trichloride
110432-91-2, Magnesium potassium chloride
(physiol. **food salt product**)
- IT 7774-34-7, **Calcium chloride** hexahydrate
(physiol. **food salt product**)
- IT 56-40-6DP, Glycine, ammonium calcium salt contg., biological studies
7791-18-6P, **Magnesium chloride** hexahydrate
39733-35-2P, Ammonium carnallite
(physiol. **food salt product**)
- L24 ANSWER 2 OF 15 HCA COPYRIGHT 2003 ACS
- 129:145851 Antibacterial, mold-proofing solution consisting of inorganic
silver complex salt and method for its manufacture. Asano, Satoshi;
Ezaki, Shinji; Nishihara, Hideaki (Sumitomo Metal Mining Co., Ltd.,
Japan). Jpn. Kokai Tokkyo Koho JP 10182326 A2 19980707 Heisei, 6
pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-227673
19970825. PRIORITY: JP 1996-294904 19961107.
- AB Odorless, nonvolatile antimicrobial solns. contain .gtoreq.0.05 mg/L
silver ion as a chloro complex salt in an **aq.** soln. contg.
ammonium chloride or alkali metal or alk. earth
chloride; the chloride ion content is .gtoreq.5 .times. 10⁻² mol/L.
Thus, an **aq.** soln. contg. 0.5 g silver/L was obtained by
dissolving silver chloride in a 3 mol/L **aq.** soln. of
calcium chloride. Then, 2 g of the soln. was
sprayed on a **food** pan (50 .times. 50 mm). Even after 20
days no mold was obsd. on the treated pan, whereas mold appeared on
a pan that was not sprayed after 5 days. The same soln. showed an
antimicrobial effect and prolonged the life of cut roses when the
soln. was used to treat the cut end of the stems before they were
placed in a vase filled with tap water.
- IT **10043-52-4**, **Calcium chloride**, biological
studies **12125-02-9**, **Ammonium chloride**,
biological studies
(manuf. of antibacterial, fungicidal solns. with silver and)
- RN 10043-52-4 HCA
CN Calcium chloride (CaCl₂) (9CI) (CA INDEX NAME)

Cl⁻ Ca²⁺ Cl⁻

RN 12125-02-9 HCA
CN Ammonium chloride ((NH₄)Cl) (9CI) (CA INDEX NAME)

Cl⁻ NH₄⁺

- IC ICM A01N059-16
ICS A61L002-18
- CC 5-2 (Agrochemical Bioregulators)
Section cross-reference(s): 17
- IT Containers
(**food**, pans; antibacterial, fungicidal solns. contg.
silver chloro complex salts for)
- IT 10043-52-4, **Calcium chloride**, biological
studies 12125-02-9, **Ammonium chloride**,
biological studies
(manuf. of antibacterial, fungicidal solns. with silver and)
- L24 ANSWER 3 OF 15 HCA COPYRIGHT 2003 ACS
126:349938 Microorganism cellulase crystallizing agents for use after
enzyme production by fermentation and cellulase use in
stone-washing, detergent, or **food** industry. Becker,
Nathaniel T.; Braunstein, Edit L.; Gros, Ernst H.; Fewkes, Robert;
Heng, Meng H. (Genencor International, Inc., USA). PCT Int. Appl.
WO 9715660 A1 19970501, 22 pp. DESIGNATED STATES: W: AL, AM, AT,
AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE,
HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK,
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR,
TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE,
BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT,
LU, MC, ML, NL, PT, SE. (English). CODEN: PIXXD2. APPLICATION: WO
1996-US16918 19961022. PRIORITY: US 1995-547096 19951023; US
1996-609362 19960301.
- AB A method for prepg. a cryst. cellulase enzyme is provided which
comprises prepg. an **aq.** soln. contg. cellulase enzyme and
adding to the **aq.** soln. a salt comprising an anion
selected from the group consisting of sulfate, phosphate, formate,
acetate, sorbate, chloride, bromide, fluoride or iodide, and a
cation selected from the group consisting of sodium, ammonium,
magnesium, potassium or calcium or a mixt. thereof. An example
demonstrates crystn. of EGIII of *Trichoderma longibrachiatum* using
magnesium acetate, sodium sulfate, sodium formate, and/or
ammonium chloride. Cellulase without the
cellulose-binding domain can be sepd. from whole cellulase using
this crystn. technique. Applications of cryst. cellulase include
stone-washing denim fabric, detergent compns., **food**
prepn., and **food** additives.
- IT 7786-30-3, **Magnesium chloride**, uses
12125-02-9, **Ammonium chloride**, uses
(crystg. agent; microorganism cellulase crystg. agents for use
after enzyme prodn. by fermn. and cellulase use in stone-washing,
detergent, or **food** industry)
- RN 7786-30-3 HCA
CN Magnesium chloride (MgCl₂) (9CI) (CA INDEX NAME)

Cl-Mg-Cl

RN 12125-02-9 HCA
 CN Ammonium chloride ((NH4)Cl) (9CI) (CA INDEX NAME)

Cl-NH₄

IC ICM C12N009-42
 CC 75-1 (Crystallography and Liquid Crystals)
 Section cross-reference(s): 7, 10, 16, 17, 46
 ST recombinant cellulase crystn salt microorganism; **food**
 cellulase recombinant crystn salt; detergent cellulase recombinant
 crystn salt; stonewashing cellulase recombinant crystn salt
 IT Salts, uses
 (crystg. agent; microorganism cellulase crystg. agents for use
 after enzyme prodn. by fermn. and cellulase use in stone-washing,
 detergent, or **food** industry)
 IT Textiles
 (denim; microorganism cellulase crystg. agents for use after
 enzyme prodn. by fermn. and cellulase use in stone-washing,
 detergent, or **food** industry)
 IT Detergents
 (enzyme-contg.; microorganism cellulase crystg. agents for use
 after enzyme prodn. by fermn. and cellulase use in stone-washing,
 detergent, or **food** industry)
 IT Detergents
 (laundry, enzyme-contg.; microorganism cellulase crystg. agents
 for use after enzyme prodn. by fermn. and cellulase use in
 stone-washing, detergent, or **food** industry)
 IT Crystal growth
 Feed additives
Food
 Ionic strength
 Microorganism
 Trichoderma longibrachiatum
 (microorganism cellulase crystg. agents for use after enzyme
 prodn. by fermn. and cellulase use in stone-washing, detergent,
 or **food** industry)
 IT Enzyme functional sites
 (substrate-binding; microorganism cellulase crystg. agents for
 use after enzyme prodn. by fermn. and cellulase use in
 stone-washing, detergent, or **food** industry)
 IT 9074-99-1, Endo-.beta.-glucanase
 (III; microorganism cellulase crystg. agents for use after enzyme
 prodn. by fermn. and cellulase use in stone-washing, detergent,
 or **food** industry)
 IT 9004-34-6, Cellulose, biological studies
 (cellulose-binding site; microorganism cellulase crystg. agents
 for use after enzyme prodn. by fermn. and cellulase use in
 stone-washing, detergent, or **food** industry)
 IT 127-09-3, Sodium acetate 141-53-7, Sodium formate 142-72-3,
 Magnesium acetate 631-61-8, Ammonium acetate 7487-88-9,
 Magnesium sulfate, uses 7647-14-5, Sodium chloride, uses

7757-82-6, Sodium sulfate, uses **7786-30-3**,

Magnesium chloride, uses **12125-02-9**,

Ammonium chloride, uses

(crystg. agent; microorganism cellulase crystg. agents for use after enzyme prodn. by fermn. and cellulase use in stone-washing, detergent, or **food** industry)

IT 9012-54-8, Cellulase 9012-54-8D, Cellulase, cellulose-binding domain-deleted derivs.

(microorganism cellulase crystg. agents for use after enzyme prodn. by fermn. and cellulase use in stone-washing, detergent, or **food** industry)

L24 ANSWER 4 OF 15 HCA COPYRIGHT 2003 ACS

123:291138 Manufacture of aluminum-low calcium salts. Bacardi, Jean-Marie (Rhone-Poulenc Specialty Chemicals Co., USA). Eur. Pat. Appl. EP 673879 A1 19950927, 8 pp. DESIGNATED STATES: R: BE, DE, FR, GB, LU, NL. (French). CODEN: EPXXDW. APPLICATION: EP 1995-400349 19950220. PRIORITY: US 1994-203338 19940228.

AB The process comprises reacting Al impurity-contg. CaO with HCl in an **aq.** reaction medium to obtain **CaCl₂** and an Al-contg. insol. residue, sepg. the **CaCl₂** from the residue, and converting the **CaCl₂** in .gtoreq.1 operations into the desired Al-low Ca salt. This method produces Ca salts that contain a min. of Al and meet the **food-grade** specifications relating to the prevention of Alzheimers disease.

IT **12125-02-9P, Ammonium chloride**, preparation

(aluminum-low **food-grade** calcium salt manuf. for Alzheimers disease prevention)

RN 12125-02-9 HCA

CN Ammonium chloride ((NH₄)Cl) (9CI) (CA INDEX NAME)

Cl-NH₄

IT **10043-52-4P, Calcium chloride**, preparation

(aluminum-low **food-grade** calcium salt manuf. for Alzheimers disease prevention)

RN 10043-52-4 HCA

CN Calcium chloride (CaCl₂) (9CI) (CA INDEX NAME)

Cl-Ca-Cl

IC ICM C01B025-32

ICS C01F011-18

CC 49-5 (Industrial Inorganic Chemicals)

Section cross-reference(s): **17**

ST **food calcium chloride** salt aluminum;

Alzheimer disease calcium salt aluminum; calcia aluminum impurity hydrochloric acid; hydroxyapatite calcium phosphate salt

- IT **Food**
(aluminum-low **food**-grade calcium salt manuf. for
Alzheimers disease prevention)
- IT Alkali metal hydroxides
(aluminum-low **food**-grade calcium salt manuf. for
Alzheimers disease prevention)
- IT 1305-78-8, Calcia, processes
(aluminum impurity-contg.; aluminum-low **food**-grade
calcium salt manuf. for Alzheimers disease prevention)
- IT 471-34-1P, Calcium carbonate, preparation **12125-02-9P**,
Ammonium chloride, preparation
(aluminum-low **food**-grade calcium salt manuf. for
Alzheimers disease prevention)
- IT 7440-70-2DP, Calcium, salts **10043-52-4P**, **Calcium**
chloride, preparation
(aluminum-low **food**-grade calcium salt manuf. for
Alzheimers disease prevention)
- IT 1306-06-5P, Hydroxyapatite 7757-93-9P, Dicalcium phosphate
7758-87-4P, Tricalcium phosphate
(aluminum-low **food**-grade calcium salt manuf. for
Alzheimers disease prevention)
- IT 1310-58-3, Potassium hydroxide, processes 1310-65-2, Lithium
hydroxide 1310-73-2, Sodium hydroxide, processes 7664-38-2,
Phosphoric acid, processes 7664-41-7, Ammonia, processes
7783-28-0, Diammonium phosphate
(aluminum-low **food**-grade calcium salt manuf. for
Alzheimers disease prevention)
- IT 1305-62-0P, Calcium hydroxide, preparation
(aluminum-low **food**-grade calcium salt manuf. for
Alzheimers disease prevention)
- IT 7647-01-0, Hydrochloric acid, processes
(**food**-grade; aluminum-low **food**-grade calcium
salt manuf. for Alzheimers disease prevention)
- IT 7429-90-5, Aluminum, processes
(impurity; aluminum-low **food**-grade calcium salt manuf.
for Alzheimers disease prevention)

L24 ANSWER 5 OF 15 HCA COPYRIGHT 2003 ACS

114:120511 Process and reagents for the refining of rape seed oil.
Yuferov, E. A.; Yuferov, A. M. (USSR). U.S.S.R. SU 1595894 A1
19900930 From: Otkrytiya, Izobret. 1990, (36), 113-14. (Russian).
CODEN: URXXAF. APPLICATION: SU 1988-4458512 19880613.

AB The process for refining of rape seed oil by **hydration**,
sepn. of phosphatides, treatment with a desulfurization agent, and
sepn. of the solid phase resulting in the target product, is
improved. The degree of removal of S-contg. compds. is increased
resulting in a target product for feed by using an **aq.**
soln. of **CaCl2** and **NH4Cl** as the desulfurizing
reagent, and, after sepg. the solid phase, the oil is washed with a
hot conc. In order to obtain a **food**-grade product, the
oil is addnl. treated first with a satd. soln. of a divalent metal
sulfate salt in H2SO4 with sepn. of the solid phase and washing the

residue with a hot condensate and then with **CaCl₂** soln. with sepn. of the solid phase and subsequent neutralizing, washing, drying, bleaching, and deodorizing.

IT 10043-52-4, **Calcium chloride**, biological studies
 (mixts. with **ammonium chloride**, desulfurizing agents, for treatment of rape seed oil)
 RN 10043-52-4 HCA
 CN Calcium chloride (CaCl₂) (9CI) (CA INDEX NAME)

Cl-Ca-Cl

IT 12125-02-9, **Ammonium chloride**, biological studies
 (mixts. with **calcium chloride**, desulfurizing agents, for treatment of rape seed oil)
 RN 12125-02-9 HCA
 CN Ammonium chloride ((NH₄)Cl) (9CI) (CA INDEX NAME)

Cl-NH₄

IC ICM C11B003-04
 CC 17-9 (Food and Feed Chemistry)
 ST rape seed oil processing; desulfurization rape seed oil processing; **ammonium chloride** treatment rape seed oil; **calcium chloride** treatment rape seed oil; sulfate salt treatment rape seed oil

IT Desulfurization
 (of rape seed oil by treatment with **calcium chloride** and **ammonium chloride** soln.)

IT 10043-52-4, **Calcium chloride**, biological studies
 (mixts. with **ammonium chloride**, desulfurizing agents, for treatment of rape seed oil)

IT 12125-02-9, **Ammonium chloride**, biological studies
 (mixts. with **calcium chloride**, desulfurizing agents, for treatment of rape seed oil)

L24 ANSWER 6 OF 15 HCA COPYRIGHT 2003 ACS
 113:130948 Coagulative gel compositions containing milk serum protein and glucono-.delta.-lactone. Nozaki, Asako (San-Ei Kagaku Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 02124067 A2 19900511 Heisei, 3 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1988-278337 19881102.

AB Gel compns., which coagulate by heating, contain whey protein, glucono-.delta.-lactone (I) and optional chlorides. An **aq** soln. contg. 5% milk serum protein (protein 74, fat 6.4, ashes 3%) was mixed with/without I (0.5% in total) at 80.degree., and kept at 25.degree. overnight. with I, a gel was formed and had a strength of

100 g/cm³; without I, no gelation was obsd.
IT 7786-30-3, **Magnesium chloride**,
biological studies 10043-52-4, **Calcium**
chloride, biological studies 12125-02-9,
Ammonium chloride, biological studies
(gel compns. contg. milk serum protein and gluconolactone and,
thermally coagulative)
RN 7786-30-3 HCA
CN Magnesium chloride (MgCl₂) (9CI) (CA INDEX NAME)

Cl-Mg-Cl

RN 10043-52-4 HCA
CN Calcium chloride (CaCl₂) (9CI) (CA INDEX NAME)

Cl-Ca-Cl

RN 12125-02-9 HCA
CN Ammonium chloride ((NH₄)Cl) (9CI) (CA INDEX NAME)

Cl-NH₄

IC ICM A23L001-0562
CC 17-13 (Food and Feed Chemistry)
IT Food
(gel compns. contg. gluconolactone and whey protein for,
thermally coagulative)
IT 7447-40-7, Potassium chloride, biological studies 7647-14-5,
Sodium chloride, biological studies 7786-30-3,
Magnesium chloride, biological studies
10043-52-4, **Calcium chloride**, biological
studies 12125-02-9, **Ammonium chloride**,
biological studies
(gel compns. contg. milk serum protein and gluconolactone and,
thermally coagulative)

L24 ANSWER 7 OF 15 HCA COPYRIGHT 2003 ACS
111:132963 Hydrophilic materials encapsulated with water-soluble gelatin
soft capsules. Kiyogoku, Nobuo; Saeki, Yushi; Tajima, Katsuhiko
(Suntory, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 01020078 A2
19890124 Heisei, 8 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP
1987-244298 19870930. PRIORITY: JP 1987-70412 19870326.
AB Hydrophilic materials having 0.55-0.80 H₂O activity are
encapsulated with gelatin films prepd. by addn. of H₂O
-holding materials so that the H₂O activity of the films
becomes equal or higher than that of the hydrophilic materials.
Since no processes for emulsification of hydrophilic materials or
conversion of films into H₂O-insol. films is involved in
this method, the soft capsules completely dissolve in H₂O

without changing flavor and taste of encapsulated **foods** (e. g. soft drinks, alc. **beverages**, plant or animal exts., etc.). The soft capsules are also useful for bath preps. A mixt. (**H2O** activity 0.65) of peppermint liquor 52.6, D-sorbitol 47.2, and .lambda.-carrageenan 0.2 was encapsulated with a film soln. comprising gelatin 30, PO-40 (sugar alc.) 42.9, and **H2O** 27.1% by wt. by orifice technique to make soft capsules (**H2O** activity of the capsule film reached equil. with that of the inner soln.). The capsules were easily dissolved in mouth with fresh flavor and without deformation nor leak of the inner soln.

IT 7786-30-3, **Magnesium chloride**,
biological studies 12125-02-9, **Ammonium**
chloride ((NH₄)Cl), biological studies
(gelatin soft capsules contg. water-holding agent and,
water-sol., for hydrophilic **foods**, water activity in
relation to)

RN 7786-30-3 HCA
CN Magnesium chloride (MgCl₂) (9CI) (CA INDEX NAME)

Cl-Mg-Cl

RN 12125-02-9 HCA
CN Ammonium chloride ((NH₄)Cl) (9CI) (CA INDEX NAME)

Cl-NH₄

IC ICM A23P001-04
ICS A23F003-16; A23F005-24; A23L001-00; A23L001-48; B01J013-02
CC 17-13 (Food and Feed Chemistry)
Section cross-reference(s): 62
ST soft capsule gelatin **food** hydrophilic
IT **Beverages**
(encapsulation of, gelatin soft capsules for, water-sol., no
emulsification process involved)

IT Lactalbumins
(gelatin soft capsules contg., water-sol., for hydrophilic
food, water holding activity in relation to)

IT Egg white
Soybean
(protein, water-sol. gelatin soft capsules contg., for
hydrophilic **food**, water holding activity in relation
to)

IT Pharmaceutical dosage forms
(capsules, soft, gelatin and water holding agents in, for
hydrophilic **foods** and bath preps., water-sol.)

IT Alcoholic **beverages**
(peppermint liqueurs, encapsulation of, gelatin soft capsules
for, water-sol.)

IT Caseins, compounds

(sodium complexes, gelatin soft capsules contg., water-sol., for hydrophilic **food**, water holding activity in relation to)

IT 64-17-5

(alcoholic **beverages**, peppermint liqueurs, encapsulation of, gelatin soft capsules for, water-sol.)

IT 50-70-4, D-Sorbitol, biological studies 50-99-7, D-Glucose, biological studies 56-40-6, Glycine, biological studies 57-50-1, biological studies 58-86-6, Xylose, biological studies 59-23-4, D-Galactose, biological studies 64-17-5, Ethanol, biological studies 69-79-4, Maltose 77-92-9, Citric acid, biological studies 107-43-7, Betaine 127-09-3, Sodium acetate 585-88-6, Maltitol 6915-15-7 7487-88-9, Magnesium sulfate, biological studies 7647-14-5, Sodium chloride, biological studies **7786-30-3, Magnesium chloride**, biological studies **12125-02-9, Ammonium chloride** ((NH₄)Cl), biological studies

(gelatin soft capsules contg. water-holding agent and, water-sol., for hydrophilic **foods**, water activity in relation to)

IT 1109-28-0, Maltotriose 9000-07-1, Carrageenan 9000-21-9, Furcellaran 9000-30-0, Guar gum 9000-40-2, Locust-bean gum 9000-65-1, Tragacanth gum 9002-18-0, Agar 9003-04-7, Poly(acrylic acid) sodium salt 9004-32-4, CMC 9005-25-8, Starch, biological studies 9005-25-8D, Starch, hydrolyzed 9053-46-7, Lycasin 9057-02-7, Pullulan 9064-57-7, .lambda.-Carrageenan 11138-66-2, Xanthan gum 32860-62-1, Maltotriitol 34612-38-9, Maltotetraose 39386-78-2, Tamarind gum 47592-59-6, Xylotriose 111775-46-3, PO-30 111775-47-4, PO-40 120720-24-3, Eswee 500 122729-98-0, Tetrap

(gelatin soft capsules contg., water-sol., for hydrophilic **food**, water holding activity in relation to)

L24 ANSWER 8 OF 15 HCA COPYRIGHT 2003 ACS

109:40275 Manufacture of calcium hydrogen phosphate dihydrate. Glaser, Vladimir; Vidensky, Jan (Czech.). Czech. CS 236290 B1 19880201, 7 pp. (Czech). CODEN: CZXXA9. APPLICATION: CS 1983-9421 19831214.

AB CaHPO₄.2H₂O (I) or its mixt. with hydroxylapatite and/or Ca₃(PO₄)₂ is manufd. from **CaCl₂** soln. from soda prodn. The **CaCl₂** soln. is treated with NaHCO₃, the CaCO₃ suspension obtained is neutralized with H₃PO₄, I is sepd., washed, and dried, and NaCl soln. and CO₂ are returned to soda prodn. The CaCO₃ pptn. and neutralization can be carried out simultaneously in the presence of a hydrolysis retarder (**MgCl₂**) and hardness modifier (Na₄P₂O₇). A waste contg. **CaCl₂** 10, NaCl 6, and **MgCl₂** 1 wt.% was treated with a waste contg. 10 wt.% NaHCO₃ at 35.degree. to give CaCO₃ which was used to neutralize 10% H₃PO₄ contg. 0.5 wt.% Na diphosphate at 35.degree.. The suspension was filtered and the ppt. washed and dried at 40.degree.. The filtrate was treated with CO₂ to give NaHCO₃; the wastewater was used to dil. the acid. The product was suitable for use in the cosmetic, **food**, and pharmaceutical industries.

IT 12125-02-9P, **Ammonium chloride**,
preparation
(formation and recycling of, in manuf. of calcium phosphates)
RN 12125-02-9 HCA
CN Ammonium chloride ((NH4)Cl) (9CI) (CA INDEX NAME)

Cl-NH₄

IT 7786-30-3, **Magnesium chloride**, uses and
miscellaneous
(stabilizer, for prevention of hydrolysis or **hydration**
of calcium phosphates)
RN 7786-30-3 HCA
CN Magnesium chloride (MgCl₂) (9CI) (CA INDEX NAME)

Cl-Mg-Cl

IT 10043-52-4P, **Calcium chloride**,
preparation
(wastes contg., from ammonia neutralization, calcium phosphates
manuf. from)
RN 10043-52-4 HCA
CN Calcium chloride (CaCl₂) (9CI) (CA INDEX NAME)

Cl-Ca-Cl

IC ICM C01B025-32
CC 49-5 (Industrial Inorganic Chemicals)
Section cross-reference(s): 17, 62, 63
IT Cosmetics
Food
Pharmaceuticals
(calcium hydrogen phosphate dihydrate manuf. for)
IT 1305-62-0, Calcium hydroxide, reactions
(ammonia neutralization with, **calcium chloride**
wastes from, calcium phosphates manuf. from)
IT 7647-14-5, Sodium chloride, uses and miscellaneous
(**calcium chloride** wastes contg., from ammonia
neutralization, calcium phosphates manuf. from)
IT 124-38-9, Carbon dioxide, reactions
(carbonation by, in manuf. of calcium phosphates from
calcium chloride-contg. wastes from ammonia
regeneration in soda prodn.)
IT 12125-02-9P, **Ammonium chloride**,
preparation
(formation and recycling of, in manuf. of calcium phosphates)
IT 7722-88-5, Sodium diphosphate
(hardening agent, for calcium phosphates from **calcium**
chloride-contg. wastes)

- IT 497-19-8, Sodium carbonate, reactions
(reaction of, with **calcium chloride** wastes,
in manuf. of calcium phosphates)
- IT 7786-30-3, **Magnesium chloride**, uses and
miscellaneous
(stabilizer, for prevention of hydrolysis or **hydration**
of calcium phosphates)
- IT 10043-52-4P, **Calcium chloride**,
preparation
(wastes contg., from ammonia neutralization, calcium phosphates
manuf. from)
- IT 497-19-8P, Sodium carbonate, preparation
(wastes from ammonia neutralization in manuf. of, **calcium
chloride**-contg., calcium phosphate manuf. from)
- IT 7664-41-7P, Ammonia, preparation
(wastes from regeneration of, **calcium chloride**
-contg., calcium phosphates manuf. from)
- L24 ANSWER 9 OF 15 HCA COPYRIGHT 2003 ACS
- 109:40274 Manufacture of calcium hydrogen phosphate dihydrate. Glaser,
Vladimir; Vidensky, Jan (Czech.). Czech. CS 236288 B1 19880201, 7
pp. (Czech). CODEN: CZXXA9. APPLICATION: CS 1983-9418 19831214.
- AB $\text{CaHPO}_4 \cdot 2\text{H}_2\text{O}$ (I) or its mixt. with hydroxylapatite and/or $\text{Ca}_3(\text{PO}_4)_2$
is manufd. from **CaCl₂** soln. from soda prodn. The
CaCl₂ is treated with $(\text{NH}_4)_2\text{CO}_3$ or $(\text{NH}_4)\text{HCO}_3$ and the solid
 CaCO_3 obtained is treated with H_3PO_4 to give I. The **CaCl₂**
soln. may be pretreated to remove part of the NaCl. The pptn. and
acid treatment may be carried out simultaneously and in the presence
of **MgCl₂** and/or $\text{Na}_4\text{P}_2\text{O}_7$ (hydrolysis stabilizer and
hardness modifier, resp.). A waste contg. **CaCl₂** 10, NaCl
6, and **MgCl₂** 1 wt.% was treated with a waste contg. 5 wt.%
 $(\text{NH}_4)_2\text{CO}_3$ at 30.degree. to give CaCO_3 which was used to neutralize
10% H_3PO_4 , contg. 0.5 wt.% Na diphosphate at 35.degree.. The ppt.
was removed by filtration, washed, and dried at 40.degree.. The
filtrate was recycled to the regeneration app. The product was
suitable for use in the cosmetic, **food**, and pharmaceutical
industries.
- IT 12125-02-9P, **Ammonium chloride**,
preparation
(formation and recycling of, in manuf. of calcium phosphate)
- RN 12125-02-9 HCA
- CN Ammonium chloride $((\text{NH}_4)\text{Cl})$ (9CI) (CA INDEX NAME)

$\text{Cl}^- \text{NH}_4$

- IT 7786-30-3, **Magnesium chloride**, uses and
miscellaneous
(stabilizer, for prevention of hydrolysis or **hydration**
of calcium phosphates)
- RN 7786-30-3 HCA
- CN Magnesium chloride (MgCl_2) (9CI) (CA INDEX NAME)

Cl-Mg-Cl

IT 10043-52-4P, Calcium chloride,
preparation
(wastes contg., from ammonia neutralization, calcium phosphates
manuf. from)
RN 10043-52-4 HCA
CN Calcium chloride (CaCl₂) (9CI) (CA INDEX NAME)

Cl-Ca-Cl

IC ICM C01B025-32
CC 49-5 (Industrial Inorganic Chemicals)
Section cross-reference(s): 17, 62, 63
ST calcium hydrogen phosphate dihydrate manuf; hydroxylapatite manuf
soda prodn waste; calcium phosphate manuf **calcium**
chloride; ammonia regeneration waste calcium phosphate
IT Cosmetics
Food
Pharmaceuticals
(calcium hydrogen phosphate dihydrate manuf. for)
IT 1305-62-0, Calcium hydroxide, reactions
(ammonia neutralization with, **calcium chloride**
wastes from, calcium phosphates manuf. from)
IT 7647-14-5P, Sodium chloride, preparation
(**calcium chloride** wastes contg., from ammonia
neutralization, calcium phosphates manuf. from)
IT 124-38-9P, Carbon dioxide, preparation
(carbonation by, in manuf. of calcium phosphates from
calcium chloride-contg. wastes from ammonia
regeneration in soda prodn.)
IT 12125-02-9P, Ammonium chloride,
preparation
(formation and recycling of, in manuf. of calcium phosphate)
IT 7722-88-5, Sodium diphosphate
(hardening agent, for calcium phosphates from **calcium**
chloride-contg. wastes)
IT 506-87-6, Ammonium carbonate 1066-33-7, Ammonium bicarbonate
(reaction of, with **calcium chloride** wastes,
in manuf. of calcium phosphates)
IT 7786-30-3, Magnesium chloride, uses and
miscellaneous
(stabilizer, for prevention of hydrolysis or **hydration**
of calcium phosphates)
IT 10043-52-4P, Calcium chloride,
preparation
(wastes contg., from ammonia neutralization, calcium phosphates
manuf. from)
IT 497-19-8P, Sodium carbonate, preparation

- (wastes from ammonia neutralization in manuf. of, **calcium chloride**-contg., calcium phosphate manuf. from)
- IT 7664-41-7P, Ammonia, preparation
(wastes from neutralization of, **calcium chloride**-contg., calcium phosphates manuf. from)
- L24 ANSWER 10 OF 15 HCA COPYRIGHT 2003 ACS
109:8912 Manufacture of calcium hydrogen phosphate (anhydrous or dihydrate). Glaser, Vladimir; Vidensky, Jan (Czech.). Czech. CS 244246 B1 19871215, 4 pp. (Czech). CODEN: CZXXA9. APPLICATION: CS 1984-9885 19841217.
- AB CaHPO4 and/or CaHPO4.2H2O, optionally mixed with hydroxyapatite and/or Ca3(PO4)2 are manufd. from NaNH4HPO4.4H2O (I) and a waste soln. contg. **CaCl2** from NH3 regeneration with milk of lime in soda prodn. The product is sepd., washed, and dried and the waste soln. and waste water, contg. NaCl and **NH4Cl**, and recycled to soda prodn., and used to regenerate NH3 or NH4OH. Waste solns. contg. **CaCl2** from soda prodn. were mixed in a stoichiometric amt. with a 10% soln. of I, heated to 30.degree., filtered, washed, and dried at 40.degree. to give CaHPO4.2H2O. The filtrate and washwater were recycled as **CaCl2** soln. after treatment with CaO, filtration, and partial removal of NaCl. The product is suitable for manuf. of cosmetics, pharmaceuticals, **food**, and feed amendments.
- IT 12125-02-9, **Ammonium chloride**, uses and miscellaneous
(filtrate and washwater contg., from calcium hydrogen phosphate manuf., recycling of)
- RN 12125-02-9 HCA
CN Ammonium chloride ((NH4)Cl) (9CI) (CA INDEX NAME)

Cl-NH4

- IT 10043-52-4, **Calcium chloride**, reactions
(reaction of, in waste solns., with ammonium sodium phosphate, calcium hydrogen phosphate from)
- RN 10043-52-4 HCA
CN Calcium chloride (CaCl2) (9CI) (CA INDEX NAME)

Cl-Ca-Cl

- IC ICM C01B025-32
CC 49-5 (Industrial Inorganic Chemicals)
Section cross-reference(s): 17, 62, 63
- ST calcium hydrogen phosphate manuf; **calcium chloride**
waste soln reaction; ammonium sodium phosphate **hydrate**
reaction; pharmaceutical cosmetic calcium hydrogen phosphate; feed **food** calcium hydrogen phosphate
- IT Feed
Food

- (additives, calcium hydrogen phosphate manuf. for)
- IT 1305-62-0, Calcium hydroxide, uses and miscellaneous 1305-78-8,
Calcium oxide, uses and miscellaneous
(**calcium chloride** solns. from ammonia
regeneration by, calcium hydrogen phosphate manuf. from)
- IT 7664-41-7P, Ammonia, preparation
(**calcium chloride** solns. from regeneration
of, calcium hydrogen phosphate manuf. from)
- IT 497-19-8P, Sodium carbonate, preparation
(**calcium chloride**-contg. waste solns. from
manuf. of, calcium hydrogen phosphate manuf. from)
- IT 7647-14-5, Sodium chloride, uses and miscellaneous
12125-02-9, Ammonium chloride, uses and
miscellaneous
(filtrate and washwater contg., from calcium hydrogen phosphate
manuf., recycling of)
- IT 1306-06-5P, Hydroxylapatite 7757-93-9P
(manuf. of calcium hydrogen phosphate and, from **calcium
chloride**-contg. waste solns. and ammonium sodium
phosphate)
- IT 7757-93-9P, Calcium hydrogen phosphate 7789-77-7P, Calcium
hydrogen phosphate dihydrate
(manuf. of, from ammonium sodium phosphate and **calcium
chloride**-contg. waste solns.)
- IT **10043-52-4, Calcium chloride**, reactions
(reaction of, in waste solns., with ammonium sodium phosphate,
calcium hydrogen phosphate from)
- IT 13011-54-6, Ammonium sodium phosphate
(reaction of, with **calcium chloride** in waste
solns., calcium hydrogen phosphate from)
- L24 ANSWER 11 OF 15 HCA COPYRIGHT 2003 ACS
- 108:223896 Production of precipitated calcium carbonate. Glaser,
Vladimir; Vidensky, Jan; Lohnisky, Jaroslav (Czech.). Czech. CS
246995 B1 19871015, 3 pp. (Czech). CODEN: CZXXA9. APPLICATION: CS
1985-5008 19850703.
- AB Pure CaCO_3 ppt. or mixts. with $\text{CaCO}_3 \cdot 6\text{H}_2\text{O}$, MgCO_3 , and/or MgCO_3
hydrate are prepd. from NH_3 regeneration or carbonation
wastewaters or mother liquors from soda prodn. with recycling of CO_2
and remaining solns. A suspension of 1 L, representing the
suspension from the carbonation column in soda manuf. by the NH_3
process, was treated with a stoichiometric amt. of waste soln. from
 NH_3 regeneration to ppt. CaCO_3 , the suspension was filtered, and the
ppt. washed and dried to give a product suitable for use in
cosmetics, **foods**, and pharmaceutical manuf. The remaining
soln., contg. mainly **NH_4Cl** and NaCl , was treated with milk
of lime at 5% of the stoichiometric amt. for **NH_4Cl** ,
aq. NH_3 was sepd. by heating, and the remaining soln.
contained **CaCl_2** and **NaCl_2** .
- IT **12125-02-9, Ammonium chloride**, reactions
(carbonation liquors contg., reaction of, with **aq.**
calcium chloride wastes from soda manuf.,

calcium carbonate from)
RN 12125-02-9 HCA
CN Ammonium chloride ((NH4)Cl) (9CI) (CA INDEX NAME)

Cl-NH₄

IT 10043-52-4P, **Calcium chloride**, reactions
(reaction of **aq.** waste, from ammonia regeneration, with
carbonation liquors from soda manuf., calcium carbonate from)
RN 10043-52-4 HCA
CN Calcium chloride (CaCl₂) (9CI) (CA INDEX NAME)

Cl-Ca-Cl

IC ICM C01F011-18
CC 49-5 (Industrial Inorganic Chemicals)
Section cross-reference(s): 17, 63
ST calcium carbonate pptn soda manufg effluent; ammonia regeneration
effluent calcium carbonate manuf; **calcium chloride**
effluent calcium carbonate manuf; carbonation effluent calcium
carbonate manuf

IT Cosmetics

Food

Pharmaceuticals

(calcium carbonate manuf. for, from soda manufg. wastewaters)
IT 506-87-6, Ammonium carbonate 1066-33-7, Ammonium bicarbonate
(carbonation liquors contg., reaction of, with **aq.**
calcium chloride wastes from soda manuf.,
calcium carbonate from)

IT 7647-14-5, Sodium chloride, reactions 12125-02-9,
Ammonium chloride, reactions
(carbonation liquors contg., reaction of, with **aq.**
calcium chloride wastes from soda manuf.,
calcium carbonate from)

IT 10043-52-4P, **Calcium chloride**, reactions
(reaction of **aq.** waste, from ammonia regeneration, with
carbonation liquors from soda manuf., calcium carbonate from)

L24 ANSWER 12 OF 15 HCA COPYRIGHT 2003 ACS
108:223895 Production of calcium salts from soda manufacturing wastes.
Glaser, Vladimir; Vidensky, Jan (Czech.). Czech. CS 246993 B1
19871015, 3 pp. (Czech). CODEN: CZXXA9. APPLICATION: CS 1985-5006
19850703.

AB Ca salts are manufd. by a pptn. process from the byproducts and
wastes from soda prodn. by the NH₃ process with recycling of CO₂ and
solns. to the soda manufg. process. A suspension 1 L with a compn.
corresponding to that of soda manufg. waste suspensions from the
carbonation column was treated with a stoichiometric amt. of H₃PO₄
in a 75 wt.% soln. and the soln. from NH₃ regeneration by NaOH. The
ppt. was filtered out and drained at 40.degree.. The product was

CaHPO₄·2H₂O, which was suitable for manuf. of cosmetics, food, pharmaceuticals, for use in elec. engineering, and as an additive to animal fodder. The remaining soln. contg. mainly **NH₄Cl** and NaCl was treated with milk of lime at 5% of the stoichiometric amt. based on **NH₄Cl**, **H₂O** and **NH₃** were removed by heating, and the remaining soln. contained **CaCl₂** and NaCl.

IT 10043-52-4P, **Calcium chloride**, reactions
(wastes, from ammonia regeneration, reaction of, with acids and waste solns. from soda manuf., calcium salts from)

RN 10043-52-4 HCA

CN Calcium chloride (CaCl₂) (9CI) (CA INDEX NAME)

Cl-Ca-Cl

IC ICM C01F011-18

CC 49-5 (Industrial Inorganic Chemicals)
Section cross-reference(s): 17, 63, 72

ST calcium phosphate manuf soda prodn waste; ammonia regeneration waste
calcium salt manuf; **calcium chloride** waste
calcium salt manuf; carbonation waste calcium salt manuf

IT Cosmetics

Food

Pharmaceuticals

(calcium hydrogen phosphate manuf. for, from soda manufg. wastes)

IT 7664-41-7P, Ammonia, preparation
(**calcium chloride** solns. from regeneration
of, for soda manuf., in calcium salt manuf.)

IT 7757-93-9P, Calcium hydrogen phosphate (CaHPO₄)
(manuf. of, from waste **calcium chloride** from
ammonia regeneration and carbonation suspensions from soda
manuf.)

IT 7664-38-2P, Phosphoric acid, reactions
(reaction of, with waste **calcium chloride**
from soda manuf., for calcium hydrogen phosphate)

IT 10043-52-4P, **Calcium chloride**, reactions
(wastes, from ammonia regeneration, reaction of, with acids and
waste solns. from soda manuf., calcium salts from)

L24 ANSWER 13 OF 15 HCA COPYRIGHT 2003 ACS

76:98216 Flavor-enhancing acetaldehyde-carbohydrate complex. Mitchell,
William A. (General Foods Corp.). U.S. US 3625709 19711207, 4 pp.
(English). CODEN: USXXAM. APPLICATION: US 1969-800246 19690218.

AB Formation of AcH-lactose complexes is effected in the presence of
0.4% by wt. of **NH₄Cl**. When frozen and freeze-dried, the
resultant powder, a food flavor and aroma enhancer, has a
good shelf-life and releases AcH when cold or hot **H₂O** is
added.

IT 10043-52-4, uses and miscellaneous
(catalysts, for acetaldehyde reaction with carbohydrates)

RN 10043-52-4 HCA

CN Calcium chloride (CaCl_2) (9CI) (CA INDEX NAME)

Cl-Ca-Cl

IT 12125-02-9, uses and miscellaneous
(catalysts, in acetaldehyde reaction with carbohydrates for
flavor enhancement)

RN 12125-02-9 HCA

CN Ammonium chloride ($(\text{NH}_4)\text{Cl}$) (9CI) (CA INDEX NAME)

Cl- NH_4

IC A23L

NCL 099140000R

CC 17 (Foods)

IT Catalysts and Catalysis
(**ammonium chloride**, in acetaldehyde reaction
with carbohydrates for flavor enhancement)

IT **Beverages**
(dry mix for, flavor-enhancing acetaldehyde-carbohydrate
complexes for)

IT 7647-14-5, uses and miscellaneous 10043-52-4, uses and
miscellaneous
(catalysts, for acetaldehyde reaction with carbohydrates)

IT 12125-02-9, uses and miscellaneous
(catalysts, in acetaldehyde reaction with carbohydrates for
flavor enhancement)

L24 ANSWER 14 OF 15 HCA COPYRIGHT 2003 ACS

73:108352 Polarographic determination of cobalt and zinc in
foodstuffs. Cheshev, K. S.; Sadabaev, M. S. (USSR). Trudy
Frunzenskogo Politekhnikheskogo Instituta, No. 28, 36-41 From: Ref.
Zh., Khim. 1969, Abstr. No. 15R18 (Russian) 1968. CODEN: TFP1A5.
ISSN: 0371-6694.

AB In developing a faster and more sensitive method for detg. Co and Zn
in **foods**, the background compn. was changed, MgSO_4 being
used instead of **CaCl_2** and gelatin soln. instead of agar.
Addn. of Na_2SO_3 to the selected background gave the same effect as H
treatment, and this operation did not require addnl. equipment.
Optimum concn. of gelatin was 0.0075-0.01%. Thus, a mixt. was
prepd. contg.: 0.2N **NH_4Cl** 2.5 ml; 2.0N NH_4OH 0.5 ml; 0.1N
 MgSO_4 0.5 ml; 0.25% gelatin soln. 0.3 ml; the exptl. soln.; and
distd. **H_2O** to 10 ml. Detn. of small amts. of Co and Zn in
chem. pure salt solns. by the comparison method gave satisfactory
results. Mean relative error was $\pm 3\%$.

CC 17 (Foods)

ST cobalt detn **foods**; zinc detn **foods**; polarography
cobalt zinc

IT **Food**, analysis
(cobalt and zinc detn. in, polarographic)

IT 7440-48-4, analysis 7440-66-6, analysis
(detn. of, in **food**)

L24 ANSWER 15 OF 15 HCA COPYRIGHT 2003 ACS

68:28653 Cultivating high-protein-containing microorganisms on hydrocarbon feed mixtures. Perkins, Michael B.; Furlong, Louis E. (Esso Research and Engineering Co.). U.S. US 3355296 19671128, 10 pp. (English). CODEN: USXXAM. APPLICATION: US 19640506.

AB. High-protein **food** is prepd. by inoculating a feed mixt. contg C1-C35 normal hydrocarbons with aerobic cells, water, and O. The hydrocarbons are contained in an **aq.** medium having N and P compds., water-sol. salts of Na, K, Mg, Ca, and Mn, nutrients, and an O-contg. gas to form a biosynthesis bath. In the bath is maintained an upper froth zone in which the wt. ratio of bacteria to froth exceeds 1:1, and a lower slurry zone. In the bath is established and maintained a wt. ratio of bacterial cells in the froth to bacterial cells in the slurry >1:1. The froth mixt. of bacterial cells, the **aq.** growth medium, and unconverted hydrocarbons are continuously removed; the bacterial cells are sepd. from the remaining froth mixt. and dried, yielding the high-protein **food**. Thus, Micrococcus cerificans was grown on C8-C19 n-paraffin hydrocarbons contg. >40 ppm. aromatics. The feed mixt. was obtained by passing San Joaquin virgin distillate (450-550.degree.F. vapor temp.) through a 5A mol. sieve and then through a 13X mol. sieve. Chromatographic anal. showed the concns. of hydrocarbons with 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19 C atoms to be 0.1, 0.4, 1.3, 3.1, 5.5, 9.9, 18.7, 25.7, 22.3, 10.9, 2.0, and 0.1 wt. %, resp. The **aq.** inorg. salt soln. contained **CaCl2** 0.01, FeSO4.7H2O 0.004, KCl 0.05, MgSO4 0.02, MnSO4 0.004, Na2SO4 0.05, **NH4Cl** 0.1, and 85% H3PO4 0.15 wt. %. Aeration at 22 cc./min./cm.2 of reactor cross-sectional area was used. C8-C19 hydrocarbon feed rate was 20 g./hr.; mineral salts feed rate 1960 g./hr.; 7.0N NH4OH feed rate 30 g./hr.; pH was controlled at .apprx.7.0 with NH4OH and the temp. at 34.degree. +- 1.degree.. Agitation at 1000 rpm. was used. Four l. of **aq.** slurry contg. .apprx.1% by wt. (dry basis) solids produced as above was transferred to a froth-flotation device. The vessel having a vol. of 7500 ml. was charged with an **aq.** slurry contg. .apprx.1.0 wt. % M. cerificans. Sufficient air was bubbled through the **aq.** slurry to produce a heavy froth zone. No stirring was used after transfer of the slurry to the froth-flotation device. Ambient temp. was used (20-25.degree.). The pH was maintained at .apprx.7.0. Between 5 and 10 min. after frothing started, samples were taken and analyzed for bacterial cell and hydrocarbon concns.

NCL 099014000

CC 17 (Foods)

ST FERMN HYDROCARBONS **FOOD** PRODN; PROTEIN PRODN MICROBIAL
FERMN; MICROBIAL FERMN PROTEIN PRODN; HYDROCARBONS.FERMN
FOOD PRODN; **FOOD** PRODN HYDROCARBONS FERMN

IT Micrococcus

(cerificans, protein manuf. from hydrocarbons by, for feed and

- IT **food)**
IT Proteins
 (manuf. of, from hydrocarbons by Micrococcus cerificans for feed
 and **food**)
IT Feed, preparation
 Food
 (protein manuf. for, from hydrocarbons by Micrococcus cerificans)
IT Hydrocarbons, biological studies
 (protein manuf. from, by Micrococcus cerificans for feed and
 food)

=> d l25 1-12 ti

- L25 ANSWER 1 OF 12 HCA COPYRIGHT 2003 ACS
TI Performance-oriented packaging standards; changes to classification,
 hazard communication, packaging and handling requirements based on
 UN standards and agency initiative
- L25 ANSWER 2 OF 12 HCA COPYRIGHT 2003 ACS
TI Wood preservative containing monofluorophosphate and metal salts
- L25 ANSWER 3 OF 12 HCA COPYRIGHT 2003 ACS
TI Calcium hydrogen phosphate
- L25 ANSWER 4 OF 12 HCA COPYRIGHT 2003 ACS
TI Method of dihydrate or/and water-free hydrogen phosphate production
- L25 ANSWER 5 OF 12 HCA COPYRIGHT 2003 ACS
TI Germination of spores of Clostridial species capable of causing
 food poisoning. V. Ionic germination of spores of some
 heat-sensitive strains of Clostridium perfringens type A
- L25 ANSWER 6 OF 12 HCA COPYRIGHT 2003 ACS
TI Cold water-reconstitutable microbiological medium
- L25 ANSWER 7 OF 12 HCA COPYRIGHT 2003 ACS
TI The possibility of inducing estrus in ewes in herds by means of
 chemical solutions
- L25 ANSWER 8 OF 12 HCA COPYRIGHT 2003 ACS
TI The utilization of microorganisms for human **food**
 materials. XIV. Fundamental studies on the culture of Aspergillus
 oryzae. 3. The relation between the hydrogen-ion concentration of
 the medium and the yield of mycelium
- L25 ANSWER 9 OF 12 HCA COPYRIGHT 2003 ACS
TI The determination of oxalic acid in tea, coffee, marmalade,
 vegetables and bread
- L25 ANSWER 10 OF 12 HCA COPYRIGHT 2003 ACS
TI Ammonium magnesium sulfate and **ammonium chloride**

fertilizers

L25 ANSWER 11 OF 12 HCA COPYRIGHT 2003 ACS

TI **Ammonium chloride** fertilizers or pure
ammonium chloride

L25 ANSWER 12 OF 12 HCA COPYRIGHT 2003 ACS

TI Determination of Phosphoric Acid

=> d l26 1-81 ti

L26 ANSWER 1 OF 81 HCA COPYRIGHT 2003 ACS

TI Manufacture of palatable anionic feed mineral concentrate

L26 ANSWER 2 OF 81 HCA COPYRIGHT 2003 ACS

TI Some taste molecules and their solution properties

L26 ANSWER 3 OF 81 HCA COPYRIGHT 2003 ACS

TI Effect of temperature on the solubility of carnallite type double salts

L26 ANSWER 4 OF 81 HCA COPYRIGHT 2003 ACS

TI A new anthropogenic (K, NH₄)MgCl₃·6H₂O phase at the location "Bunte First" in the repository for radioactive wastes in Morsleben, Germany

L26 ANSWER 5 OF 81 HCA COPYRIGHT 2003 ACS

TI Isodimorphic cocrystallization of isostructural ammonium chloro- and bromocarnallites

L26 ANSWER 6 OF 81 HCA COPYRIGHT 2003 ACS

TI Thermodynamics of formation of carnallite type double salts

L26 ANSWER 7 OF 81 HCA COPYRIGHT 2003 ACS

TI Structure of magnesium chloride-rubidium chloride hexahydrate: corrigendum

L26 ANSWER 8 OF 81 HCA COPYRIGHT 2003 ACS

TI Crystallographic investigations of [Mg(H₂O)₆]XCl₃ double salts (X⁺ = K⁺, Rb⁺, Cs⁺, NH₄⁺): crystal structure of [Mg(H₂O)₆]CsCl₃

L26 ANSWER 9 OF 81 HCA COPYRIGHT 2003 ACS

TI Preparation of a carrier for a Ziegler-Natta polymerization catalyst, the carrier and its use

L26 ANSWER 10 OF 81 HCA COPYRIGHT 2003 ACS

TI Formation of solid solutions from carnallite-type double salts

L26 ANSWER 11 OF 81 HCA COPYRIGHT 2003 ACS

TI Calcium chloride hexahydrate-ammonium chloride binary solutions: a DSC study

- L26 ANSWER 12 OF 81 HCA COPYRIGHT 2003 ACS
TI Mechanism and kinetics of formation and decomposition of carnallitic double salts
- L26 ANSWER 13 OF 81 HCA COPYRIGHT 2003 ACS
TI Thermoanalytical investigations on the decomposition of double salts. Part II. The decomposition of double salts metal magnesium chloride hydrates ($\text{MeCl} \cdot \text{MgCl}_2 \cdot 6\text{H}_2\text{O}$ (Me = ammonium, rubidium, cesium))
- L26 ANSWER 14 OF 81 HCA COPYRIGHT 2003 ACS
TI Method of mixture of dihydrate and anhydrous calcium hydrogen phosphate production
- L26 ANSWER 15 OF 81 HCA COPYRIGHT 2003 ACS
TI Method of mixture of dihydrate and anhydrous calcium hydrogenphosphate production
- L26 ANSWER 16 OF 81 HCA COPYRIGHT 2003 ACS
TI Method of dihydrate and anhydrous calcium hydrogen phosphate mixture production
- L26 ANSWER 17 OF 81 HCA COPYRIGHT 2003 ACS
TI Dehydration characteristics of compounds in the system **ammonium magnesium chloride hydrate**-ammonia ($\text{MgCl}_2 \cdot \text{NH}_4\text{Cl} \cdot n\text{H}_2\text{O} \cdot \text{NH}_3$) in the production of magnesium chloride anhydride by the ammonium chloride-ammonia process
- L26 ANSWER 18 OF 81 HCA COPYRIGHT 2003 ACS
TI Heat-storage material
- L26 ANSWER 19 OF 81 HCA COPYRIGHT 2003 ACS
TI Crystal form and structure of ammonium hexaaquamagnesium **trichloride**, $\text{NH}_4[\text{Mg}(\text{H}_2\text{O})_6]\text{Cl}_3$
- L26 ANSWER 20 OF 81 HCA COPYRIGHT 2003 ACS
TI Crystal structure of magnesium chloride.ammonium chloride.hexahydrate
- L26 ANSWER 21 OF 81 HCA COPYRIGHT 2003 ACS
TI Dehydration characteristics of compounds related with the $\text{MgCl}_2 \cdot \text{NH}_4\text{Cl} \cdot n\text{H}_2\text{O} \cdot \text{NH}_3$ system in heating
- L26 ANSWER 22 OF 81 HCA COPYRIGHT 2003 ACS
TI Production of anhydrous magnesium chloride by ammonium chloride-ammonia process
- L26 ANSWER 23 OF 81 HCA COPYRIGHT 2003 ACS
TI Cooling mixtures

- L26 ANSWER 24 OF 81 HCA COPYRIGHT 2003 ACS
TI Improved spin Hamiltonian parameters for manganese(2+) ion determined by EPR at zero magnetic field
- L26 ANSWER 25 OF 81 HCA COPYRIGHT 2003 ACS
TI Analytical methods for nitrate and nitrite in feed. Part III. Spectrophotometric determination of nitrate and nitrite with sulfanilic acid/1-naphthylamine, and of nitrite with resorcinol/zirconium(IV) oxychloride
- L26 ANSWER 26 OF 81 HCA COPYRIGHT 2003 ACS
TI Dehydration of ammonium magnesium chloride hexahydrate (ammonium carnallite)
- L26 ANSWER 27 OF 81 HCA COPYRIGHT 2003 ACS
TI Thermal decomposition reactions of some magnesium compounds in the presence of ammonium chloride
- L26 ANSWER 28 OF 81 HCA COPYRIGHT 2003 ACS
TI Anhydrous magnesium chloride
- L26 ANSWER 29 OF 81 HCA COPYRIGHT 2003 ACS
TI Effect of a calcium chloride + ammonium nitrate additive on the kinetics of portland cement hydration
- L26 ANSWER 30 OF 81 HCA COPYRIGHT 2003 ACS
TI Ammonia-magnesium chloride adduct and its use for fertilizer production
- L26 ANSWER 31 OF 81 HCA COPYRIGHT 2003 ACS
TI Anhydrous magnesium chloride
- L26 ANSWER 32 OF 81 HCA COPYRIGHT 2003 ACS
TI PMR investigation on crystalline carnallite hydrates
- L26 ANSWER 33 OF 81 HCA COPYRIGHT 2003 ACS
TI Phase composition of ammonium carnallite, its dehydration and decomposition products
- L26 ANSWER 34 OF 81 HCA COPYRIGHT 2003 ACS
TI Thermochemical study of ammonium-carnallite
- L26 ANSWER 35 OF 81 HCA COPYRIGHT 2003 ACS
TI Additivity relations in polar diamagnetic salts. III. Double salts of magnesium and zinc with potassium and ammonium and some alums
- L26 ANSWER 36 OF 81 HCA COPYRIGHT 2003 ACS
TI Solubility in a quaternary mutual aqueous system of chlorides and perchlorates of magnesium and ammonium at 25.deg.
- L26 ANSWER 37 OF 81 HCA COPYRIGHT 2003 ACS
TI The determination of esterified oils by pancreatic lipase. II.

Simplification of the method

- L26 ANSWER 38 OF 81 HCA COPYRIGHT 2003 ACS
TI Thermodynamic study of decomposition of ammonium carnallite
- L26 ANSWER 39 OF 81 HCA COPYRIGHT 2003 ACS
TI Formation of spherical Al_2O_3 and alumina-oxide catalysts by hydrocarbon-ammonia method. I. Role of electrolytes in the formation process
- L26 ANSWER 40 OF 81 HCA COPYRIGHT 2003 ACS
TI Preparation of chlorine from **ammonium chloride**
- L26 ANSWER 41 OF 81 HCA COPYRIGHT 2003 ACS
TI Hydrogen source
- L26 ANSWER 42 OF 81 HCA COPYRIGHT 2003 ACS
TI Thermochemistry of the dehydration of carnallite
- L26 ANSWER 43 OF 81 HCA COPYRIGHT 2003 ACS
TI Recovery of vanadium pentoxide from its ores
- L26 ANSWER 44 OF 81 HCA COPYRIGHT 2003 ACS
TI Magnesium phosphate
- L26 ANSWER 45 OF 81 HCA COPYRIGHT 2003 ACS
TI Anhydrous ammonium **magnesium chloride** and **magnesium chloride**
- L26 ANSWER 46 OF 81 HCA COPYRIGHT 2003 ACS
TI Preparation of dicalcium phosphate of stoichiometric composition
- L26 ANSWER 47 OF 81 HCA COPYRIGHT 2003 ACS
TI Hydrothermal synthesis of garnets containing V^{3+} , In^{3+} , and Sc^{3+}
- L26 ANSWER 48 OF 81 HCA COPYRIGHT 2003 ACS
TI Anhydrous magnesium phosphate
- L26 ANSWER 49 OF 81 HCA COPYRIGHT 2003 ACS
TI Method for the preparation of ammonia and chlorine starting from **ammonium chloride**
- L26 ANSWER 50 OF 81 HCA COPYRIGHT 2003 ACS
TI Calcium phosphate and **ammonium chloride**
- L26 ANSWER 51 OF 81 HCA COPYRIGHT 2003 ACS
TI Exploitation of residual liquors in calcined soda plants
- L26 ANSWER 52 OF 81 HCA COPYRIGHT 2003 ACS
TI Preparation of metallurgical first grade magnesium oxide from dolomite

- L26 ANSWER 53 OF 81 HCA COPYRIGHT 2003 ACS
TI The effect of some factors on the reaction rate of magnesium oxide in **ammonium chloride** solution
- L26 ANSWER 54 OF 81 HCA COPYRIGHT 2003 ACS
TI Anhydrous **magnesium chloride**
- L26 ANSWER 55 OF 81 HCA COPYRIGHT 2003 ACS
TI Production of anhydrous **magnesium chloride** by heating of ammonium carnallite
- L26 ANSWER 56 OF 81 HCA COPYRIGHT 2003 ACS
TI Regeneration of solutions for the manufacture of hydrogen peroxide from alkyl anthraquinones
- L26 ANSWER 57 OF 81 HCA COPYRIGHT 2003 ACS
TI Bleaching process for liparite, trachyte, liparite tuff, marly clay, marly, kaolinitic, and clay-like liparite tuff with total recovery of the used sulfuric acid solution, and its application for the preparation of superphosphate
- L26 ANSWER 58 OF 81 HCA COPYRIGHT 2003 ACS
TI Anhydrous **magnesium chloride**
- L26 ANSWER 59 OF 81 HCA COPYRIGHT 2003 ACS
TI Separation of sodium borohydride
- L26 ANSWER 60 OF 81 HCA COPYRIGHT 2003 ACS
TI Preparation of lead-zirconate-titanate compositions. I. Determination of unreacted constituents
- L26 ANSWER 61 OF 81 HCA COPYRIGHT 2003 ACS
TI Differential thermal analysis of magnesium chloride hydrates
- L26 ANSWER 62 OF 81 HCA COPYRIGHT 2003 ACS
TI Methods of preparing isotonic solutions by means of graphs or tables on the basis of experimentally found iso-osmotic values
- L26 ANSWER 63 OF 81 HCA COPYRIGHT 2003 ACS
TI Glutamyl polypeptides
- L26 ANSWER 64 OF 81 HCA COPYRIGHT 2003 ACS
TI Manufacture of alkaloids from opium
- L26 ANSWER 65 OF 81 HCA COPYRIGHT 2003 ACS
TI Biosynthetic chlortetracycline
- L26 ANSWER 66 OF 81 HCA COPYRIGHT 2003 ACS
TI Complexometric determination of sulfate in pharmaceutical compounds
- L26 ANSWER 67 OF 81 HCA COPYRIGHT 2003 ACS
TI Amino acid mixtures having a high cystine content

- L26 ANSWER 68 OF 81 HCA COPYRIGHT 2003 ACS
TI Salt extraction of streptomycin and vitamin B12
- L26 ANSWER 69 OF 81 HCA COPYRIGHT 2003 ACS
TI Application of complexons in pharmaceutical analysis. Determination of calcium salts in medicaments
- L26 ANSWER 70 OF 81 HCA COPYRIGHT 2003 ACS
TI Folic acid in liquid prescriptions
- L26 ANSWER 71 OF 81 HCA COPYRIGHT 2003 ACS
TI Dehydration of magnesium chloride
- L26 ANSWER 72 OF 81 HCA COPYRIGHT 2003 ACS
TI A study of isotonic solutions
- L26 ANSWER 73 OF 81 HCA COPYRIGHT 2003 ACS
TI Electrolytic production of magnesium
- L26 ANSWER 74 OF 81 HCA COPYRIGHT 2003 ACS
TI Chemistry and pharmacology of acetylsalicylic acid and its salts
- L26 ANSWER 75 OF 81 HCA COPYRIGHT 2003 ACS
TI Copper limits of the British Pharmacopeia
- L26 ANSWER 76 OF 81 HCA COPYRIGHT 2003 ACS
TI Notes on the water of crystallization of quinine sulfate
- L26 ANSWER 77 OF 81 HCA COPYRIGHT 2003 ACS
TI Report on microchemical methods for (the identification of) synthetics
- L26 ANSWER 78 OF 81 HCA COPYRIGHT 2003 ACS
TI Collargol, its production and properties
- L26 ANSWER 79 OF 81 HCA COPYRIGHT 2003 ACS
TI Adhesive
- L26 ANSWER 80 OF 81 HCA COPYRIGHT 2003 ACS
TI The solubility of glass
- L26 ANSWER 81 OF 81 HCA COPYRIGHT 2003 ACS
TI Salts of dibromobehenic acid.

=> d l26 1,2 cbib abs hitstr hitind

- L26 ANSWER 1 OF 81 HCA COPYRIGHT 2003 ACS
133:207116 Manufacture of palatable anionic feed mineral concentrate.
Moore, William P. (Agri-Nutrients Technology Group, Inc., USA).
U.S. US 6120815 A 20000919, 7 pp. (English). CODEN: USXXAM.

APPLICATION: US 1999-429706 19991029.

AB Palatable anionic mineral feed conc. granules were prepd. The four step method comprises: (a) metathetically reacting ammonium sulfate with a mol. excess of **magnesium chloride** in acidic water to form an **ammonium chloride**, **magnesium sulfate**, and **magnesium chloride** anionic salt soln.; (b) mixing the anionic soln. with comestible proteinaceous feed particles to form damp conc. particles; (c) mixing the damp conc. particles with a palatability enhancing molasses binder to form damp conc. granules; and (d) drying the granules to a moisture content between 3 and 15%. Thus, the a mixt. formed in step (a) may contain **NH₄Cl** 224.54, **MgSO₄** 252.45, **MgCl₂** 12.75, **LiCl** 0.38, **CaCl₂** 2.69, **KCl** 0.38, **NaCl** 1.01, **CaSO₄** 0.48, **H₃PO₄** 6.04, and **H₂O** 370.38 lbs. Dry palatable anionic feed mineral conc. granules exhibit an excess of the strong anions, chloride and sulfate, over the strong cations, sodium and potassium. The attrition-resistant granular conc. compn. may be effectively blended with animal feeds to form storage stable feed rations for com. breeding animals for preventing parturient paresis.

IT 10043-52-4, **Calcium chloride** (**CaCl₂**), biological studies
(palatable anionic feed mineral conc. manuf.)
RN 10043-52-4 HCA
CN Calcium chloride (**CaCl₂**) (9CI) (CA INDEX NAME)

Cl-Ca-Cl

IT 12125-02-9P, **Ammonium chloride**
(**(NH₄)Cl**), biological studies
(palatable anionic feed mineral conc. manuf.)
RN 12125-02-9 HCA
CN Ammonium chloride (**(NH₄)Cl**) (9CI) (CA INDEX NAME)

Cl-NH₄

IT 7786-30-3, **Magnesium chloride** (**MgCl₂**), biological studies
(palatable anionic feed mineral conc. manuf.)
RN 7786-30-3 HCA
CN Magnesium chloride (**MgCl₂**) (9CI) (CA INDEX NAME)

Cl-Mg-Cl

IC ICM A23K001-175
NCL 426074000
CC 17-12 (Food and Feed Chemistry)
Section cross-reference(s): 18
IT 7440-09-7, Potassium, biological studies 7440-23-5, Sodium,

- biological studies 7440-70-2, Calcium, biological studies 7447-40-7, Potassium chloride (KCl), biological studies 7647-14-5, Sodium chloride, biological studies 7664-38-2, Phosphoric acid, biological studies 7757-93-9 7778-18-9 **10043-52-4**, **Calcium chloride (CaCl₂)**, biological studies 14808-79-8, Sulfate, biological studies 16887-00-6, Chloride, biological studies (palatable anionic feed mineral conc. manuf.)
- IT 7487-88-9P, Sulfuric acid magnesium salt (1:1), biological studies **12125-02-9P, Ammonium chloride** ((NH₄)Cl), biological studies (palatable anionic feed mineral conc. manuf.)
- IT 7783-20-2, Ammonium sulfate, biological studies **7786-30-3, Magnesium chloride (MgCl₂)**, biological studies (palatable anionic feed mineral conc. manuf.)
- L26 ANSWER 2 OF 81 HCA COPYRIGHT 2003 ACS
- 131:227863 Some taste molecules and their solution properties. Parke, Sneha A.; Birch, Gordon G.; Dijk, Roelina (Department of Food Science & Technology, University of Reading, Reading, RG6 6AP, UK). Chemical Senses, 24(3), 271-279 (English) 1999. CODEN: CHSED8. ISSN: 0379-864X. Publisher: Oxford University Press.
- AB The soln. properties of a variety of different sapid substances from all four basic taste modalities, namely, sweet (n = 24), salty (n = 7), sour (n = 11) and bitter (n = 2), were investigated. Some multisapophoric mols., i.e. mols. exhibiting more than one taste, have also been included in the study in an attempt to define their properties in relation to the tastes they exhibit; eight sweet-bitter and three salty-bitter mols. were used. The d. and sound velocity of their solns. in water were measured and their apparent vols., apparent compressibilities and compressibility **hydration** nos. calcd. and compared. Apparent molar volumes (.PHI.v) and apparent sp. vols. (ASV) reflect the state of **hydration** of the mols., and thus their extent of interaction with water structure. The range of ASVs reported are 0.13-0.49 cm³/g for salty mols., 0.55-0.68 cm³/g for sweet mols., 0.53-0.88 cm³/g for sweet-bitter mols. and a much wider range (0.16-0.85 cm³/g) for sour mols. Isentropic apparent specific compressibilities range from -2.33 .times. 10⁻⁵ to -8.06 .times. 10⁻⁵ cm³/g bar for salty mols., -3.38 .times. 10⁻⁷ to -2.34 .times. 10⁻⁵ cm³/g bar for sweet mols., +6.35 .times. 10⁻⁶ to -2.22 .times. 10⁻⁵ cm³/g bar for sweet-bitter mols. and +6.131 .times. 10⁻⁶ to -2.99 .times. 10⁻⁵ cm³/g bar for sour mols. Compressibility **hydration** nos. are also determinable from the measurements of isentropic compressibilities and these reflect the no. of water mols. that are disturbed by the presence of the solutes in soln. This study also shows that it is possible to group isentropic apparent molar compressibility values by the taste quality exhibited by the mols. in the same order as for ASV.
- IT **7786-30-3, Magnesium chloride**, biological studies **10043-52-4, Calcium**

chloride, biological studies 12125-02-9,
 Ammonium chloride, biological studies
 (taste mols. and their soln. properties)

RN 7786-30-3 HCA

CN Magnesium chloride (MgCl₂) (9CI) (CA INDEX NAME)

Cl-Mg-Cl

RN 10043-52-4 HCA

CN Calcium chloride (CaCl₂) (9CI) (CA INDEX NAME)

Cl-Ca-Cl

RN 12125-02-9 HCA

CN Ammonium chloride ((NH₄)Cl) (9CI) (CA INDEX NAME)

Cl-NH₄

CC 17-2 (Food and Feed Chemistry)

IT Hydration number

(compressibility; taste mols. and their soln. properties)

IT 50-21-5, Lactic acid, biological studies 50-70-4, Sorbitol,
 biological studies 50-99-7, D-Glucose, biological studies
 56-81-5, Glycerol, biological studies 57-48-7, D-Fructose,
 biological studies 57-50-1, Sucrose, biological studies 58-08-2,
 Caffeine, biological studies 58-86-6, D-Xylose, biological studies
 59-23-4, D-Galactose, biological studies 63-42-3, Lactose
 64-17-5, Ethanol, biological studies 64-18-6, Formic acid,
 biological studies 66-84-2, Glucosamine hydrochloride 67-63-0,
 2-Propanol, biological studies 67-64-1, Acetone, biological
 studies 69-65-8, D-Mannitol 69-79-4, Maltose 71-23-8,
 1-Propanol, biological studies 76-03-9, Trichloroacetic acid,
 biological studies 77-92-9, Citric acid, biological studies
 77-95-2, Quinic acid 79-09-4, Propanoic acid, biological studies
 87-69-4, Tartaric acid, biological studies 87-79-6, L-Sorbose
 87-89-8, Inositol 87-99-0, Xylitol 90-80-2, D-Glucono-1,5-
 lactone 97-30-3, Methyl-.alpha.-D-glucopyranoside 99-20-7,
 .alpha.,.alpha.-Trehalose 107-21-1, Ethylene glycol, biological
 studies 109-99-9, Tetrahydrofuran, biological studies 128-44-9,
 Sodium saccharin 130-89-2, Quinine hydrochloride 142-47-2,
 Monosodium glutamate 147-85-3, L-Proline, biological studies
 512-69-6, Raffinose 526-95-4, Gluconic acid 612-05-5,
 Methyl-.beta.-D-xylopyranoside 709-50-2, Methyl-.beta.-D-
 glucopyranoside 1310-58-3, Potassium hydroxide, biological studies
 2438-80-4, L-Fucose 3370-81-8, 3-O-Methyl-D-glucopyranose
 3396-99-4, Methyl-.alpha.-D-galactopyranoside 3458-28-4, D-Mannose
 4618-18-2, Lactulose 5328-37-0, L-Arabinose 7447-41-8, Lithium
 chloride, biological studies 7647-01-0, Hydrochloric acid,
 biological studies 7647-14-5, Sodium chloride, biological studies

7664-38-2, Phosphoric acid, biological studies 7664-93-9, Sulfuric acid, biological studies 7681-11-0, Potassium iodide, biological studies 7697-37-2, Nitric acid, biological studies 7705-08-0, Ferric chloride, biological studies **7786-30-3, Magnesium chloride**, biological studies **10043-52-4, Calcium chloride**, biological studies 10099-74-8, Lead nitrate 10323-20-3, D-Arabinose 10361-37-2, Barium chloride, biological studies **12125-02-9, Ammonium chloride**, biological studies 13718-94-0, Palatinose 14475-11-7, Sodium tartrate, biological studies 22839-47-0, Aspartame 55589-62-3, Acesulfame potassium 56038-13-2, Sucralose
(taste mols. and their soln. properties)

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?ds

Set	Items	Description
S1	73064	(MAGNESIUM? ? OR MG OR CALCIUM? ? OR CA) (W) (CHLORIDE? ? OR DICHLORIDE? ?) OR MGCL2 OR CACL2
S2	35629	AMMONIUM? ?(W)CHLORIDE? ? OR NH4CL
S3	193338	HYDRAT?
S4	5145090	AQ? ? OR AQUEOUS? OR H2O OR WATER?
S5	2354088	FOOD?
S6	216950	BEVERAG?
S7	1601	S1 AND S2
S8	132	S7 AND S3
S9	7	S8 AND (S5 OR S6)
S10	843	S7 AND S4
S11	38	S10 AND (S5 OR S6)
S12	35	S11 NOT S9
S13	7	RD S9 (unique items)
S14	32	RD S12 (unique items)

?t s13/7,de/all

13/7,DE/1 (Item 1 from file: 350)
 DIALOG(R)File 350:Derwent WPIX
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014276960

WPI Acc No: 2002-097662/200213

Manufacturing highly concentrated polyglutamic acid by culturing Bacillus species in a medium containing controlled levels of saccharides produces high yield useful for the food and cosmetic industries
 Patent Assignee: KOREA ADV INST SCI & TECHNOLOGY (KOAD)
 Inventor: DO J H; JANG H N; LEE S Y; TAKURNAGENDRANARAYAN ; CHANG H N; DOH J H; TAKURNAGEN D; CHANG H; DO J; LEE S; THAKUR N N
 Number of Countries: 022 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200190395	A1	20011129	WO 2000KR761	A	20000714	200213 B
KR 2001106025	A	20011129	KR 200027278	A	20000520	200234
KR 363434	B	20021205	KR 200027278	A	20000520	200335

Priority Applications (No Type Date): KR 200027278 A 20000520

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200190395	A1	E	9	C12P-021/02	
Designated States (National): CN JP US					
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
KR 2001106025	A			C12P-013/14	
KR 363434	B			C12P-013/14	Previous Publ. patent KR 2001106025

Abstract (Basic): WO 200190395 A1

Abstract (Basic):

NOVELTY - Manufacturing highly concentrated polyglutamic acid, comprising culturing Bacillus species under batch or fed-batch conditions in a medium containing glycerol, citric acid and glutamic acid, with saccharides supplied to keep concentration at 2-10 g/l, is new.

USE - For manufacturing highly concentrated polyglutamic acid without formation of undesirable by products. Polyglutamic acid is used as an ingredient in foods and cosmetics.

pp; 9 DwgNo 0/3

Title Terms: MANUFACTURE; HIGH; CONCENTRATE; POLYGLUTAMIC; ACID; CULTURE; BACILLUS; SPECIES; MEDIUM; CONTAIN; CONTROL; LEVEL; PRODUCE; HIGH; YIELD; USEFUL; FOOD; COSMETIC; INDUSTRIAL

Derwent Class: B04; D16

International Patent Class (Main): C12P-013/14; C12P-021/02

International Patent Class (Additional): C12P-021/00

13/7, DE/2 (Item 2 from file: 350)

DIALOG(R) File 350: Derwent WPIX

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014182240

WPI Acc No: 2002-002937/200201

Mixture useful as food, feed and drug for preventing dermatophytosis, comprises an equal amount of magnesium chloride, phosphoric acid and ammonium chloride, obtained by dissolving struvite in hydrochloric acid

Patent Assignee: SHIN NIPPONSHA YG (SHIN-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2001245685	A	20010911	JP 2000105578	A	20000303	200201 B

Priority Applications (No Type Date): JP 2000105578 A 20000303

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2001245685	A			8 C12P-003/00	

Abstract (Basic): JP 2001245685 A

Abstract (Basic):

NOVELTY - A mixture comprising hydrated magnesium chloride hexahydrate, phosphoric acid and ammonium chloride, obtained by dissolving an inorganic substance such as struvite in hydrochloric

acid, is new.

DETAILED DESCRIPTION - A mixture containing magnesium chloride hexahydrate, phosphoric acid and ammonium chloride, ($MgCl_2 \cdot 6H_2O + H_3PO_4 + NH_4Cl$), is obtained by dissolving an inorganic substance such as struvite ($MgNH_4PO_4 \cdot 6H_2O$) in hydrochloric acid. The struvite is obtained from bacillus natto (*Bacillus subtilis*) by metabolism. The mixture contains equal number of $MgCl_2 \cdot 6H_2O$ or its anhydrous salt, H_3PO_4 , and NH_4Cl . An INDEPENDENT CLAIM is also included for food, feed, drug and quasi-drug containing the mixture.

USE - As food, feed, drug and quasi-drug for onset prevention and treatment of dermatophytosis, periodontal disease and shoulder stiffness (claimed).

ADVANTAGE - The symptoms such as dermatophytosis, shoulder stiffness, is recovered or relieved simultaneously by consuming the mixture.

pp; 8 DwgNo 0/4

Title Terms: MIXTURE; USEFUL; FOOD; FEED; DRUG; PREVENT; DERMATOPHYTOSIS; COMPRISE; EQUAL; AMOUNT; MAGNESIUM; CHLORIDE; PHOSPHORIC; ACID; AMMONIUM; CHLORIDE; OBTAIN; DISSOLVE; HYDROCHLORIC; ACID

Derwent Class: B04; D16

International Patent Class (Main): C12P-003/00

International Patent Class (Additional): A23F-005/14; A23K-001/00; A23K-001/16; A23L-001/30; A23L-001/304; A61K-033/06; A61K-033/42; A61P-001/02; A61P-021/00; C12J-001/00; C12R-001-125; C12P-003/00

13/7,DE/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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014113760

WPI Acc No: 2001-597972/200168

Preparation of gamma-poly(glutamic acid) using *Bacillus* species, useful e.g. in foods or cosmetics, includes pH adjustment, centrifuging, concentration and alcohol precipitation

Patent Assignee: KOREA ADV INST SCI & TECHNOLOGY (KOAD); HANKOOK KAGAKU GIJUTSUIN (KOKA-N); CHANG H (CHAN-I); DO J (DOJJ-I); KWON S (KWON-I); LEE S (LEES-I)

Inventor: CHANG H; DO J; KWON S; LEE S; DO J H; JANG H N; KWON S H; LEE S Y ; CHANG H N; DOH J H

Number of Countries: 004 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 10064713	A1	20010712	DE 1064713	A	20001222	200168 B
JP 2001218593	A	20010814	JP 2000393947	A	20001226	200168
US 20010016341	A1	20010823	US 2000750443	A	20001228	200168
KR 2001064334	A	20010709	KR 9964504	A	19991229	200176
KR 327561	B	20020315	KR 9964504	A	19991229	200263

Priority Applications (No Type Date): KR 9964504 A 19991229

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 10064713	A1		7	C12P-021/02	
JP 2001218593	A		5	C12P-013/14	
US 20010016341	A1			C12P-013/14	
KR 2001064334	A			C12P-013/14	
KR 327561	B			C12P-013/14	Previous Publ. patent KR 2001064334

Abstract (Basic): DE 10064713 A1

Abstract (Basic):

NOVELTY - Preparation of gamma-poly(glutamic acid) (I) using Bacillus species, is new.

DETAILED DESCRIPTION - Preparation of gamma-poly(glutamic acid) (I) using Bacillus species, is new.

A (I)-producing microorganism (A) is grown for 15-30 hr at pH 5-7.5 and 30-40 degreesC to produce a highly viscous medium of (I) content 20-30 g/l. (A) is removed by adjusting to pH 2-4 or 7-9 and centrifuging at 3000-9000 rpm for 10-50 minutes. (I) is then isolated by concentration of the medium using a filtration element and precipitation by adding alcohol.

USE - (I), which is fully biodegradable, is a replacement for non-degradable macromolecules in foods, cosmetics, paints, oil removers and surfactants, also as medical material, functional carrier, membrane material and electrical constructional material.

ADVANTAGE - The method is economical and efficient, with simple removal of (A) (at relatively low centrifugation speeds) and subsequent concentration. Recovery of (I) is up to 60% and the amount of alcohol needed for precipitation is only 1/5 of that used in standard methods.

pp; 7 DwgNo 0/3

Title Terms: PREPARATION; GAMMA; POLY; GLUTAMIC; ACID; BACILLUS; SPECIES; USEFUL; FOOD; COSMETIC; PH; ADJUST; CENTRIFUGE; CONCENTRATE; ALCOHOL; PRECIPITATION

Derwent Class: A23; D13; D16; D21; D25; G02

International Patent Class (Main): C12P-013/14; C12P-021/02

International Patent Class (Additional): C07K-014/32; C08G-069/10; C12N-001/00; C12N-001/20; C12P-021/04; C12P-013/14; C12R-001-10; C12R-001-125

13/7,DE/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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013739177

WPI Acc No: 2001-223407/200123

New microorganism for decomposing caffeine obtained from residue of coffee and/or tea extract, useful as organic material such as fertilizer, soil substitute and soil improvement material

Patent Assignee: SUNTORY LTD (SUNR)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2001046057	A	20010220	JP 99228454	A	19990812	200123 B

Priority Applications (No Type Date): JP 99228454 A 19990812

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2001046057	A		10	C12N-001/20	

Abstract (Basic): JP 2001046057 A

Abstract (Basic):

NOVELTY - A microorganism which can be grown in a culture medium containing caffeine as only source of organic substance nutrition, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) manufacture of organic substance materials from caffeine containing material using the microorganism Micrococcus sp; and

(2) screening method of microorganisms which involves cultivating microorganism in a culture medium containing caffeine as source of

organic nutrition.

USE - For manufacturing organic substance materials such as fertilizer, soil substitute and soil improvement material, from caffeine containing materials such as residue of coffee and/or tea from domestic foodstuff works (claimed) or restaurants.

ADVANTAGE - The caffeine which inhibits the growth of crops, can be effectively decomposed in a short time. The microorganism especially *Micrococcus* sp. SAM2240 (FERM P-17511) strain, can be isolated from the coffee and/or tea extract residue efficiently. The residue of coffee and/or tea extract can be converted into organic substance such as fertilizer using the microorganism within a short period of time.

1 kg of mixture of microorganism (10 to the power of 8 cells/g) isolated from pig feces was dispersed in a culture medium containing caffeine (0.1 g), ammonium chloride (0.2 g), calcium chloride (0.1 g), potassium dihydrogen phosphate (0.1 g), hydrated magnesium sulfate (0.02), ferrous sulfate (0.01), cobalt chloride (10 microM) yeast extract (0.02 g) and water (100 ml). The culture solution was mixed with 5 kg of coffee extract residue and the pH was adjusted to neutral by sodium carbonate. The solution was placed in a wooden box and allow to ferment for 7 days. The culture solution was incubated in flat plate culture medium and 105 strains were isolated. The strains were cultivated for 36 hours at 30 degrees C in a culture medium containing calcium chloride (0.01), potassium dihydrogen phosphate (0.1 g), hydrated magnesium sulfate (0.02), ferrous sulfate (0.01), cobalt chloride (10 microM) and water. The decomposition ratio of caffeine was evaluated by high performance liquid chromatography analysis. 9 strains of microorganism were found to have 100% decomposition ratio. Strain 1 was evaluated to be grown in culture medium containing only caffeine and found to have high caffeine decomposability.

pp; 10 DwgNo 0/4

Title Terms: NEW; MICROORGANISM; DECOMPOSE; CAFFEINE; OBTAIN; RESIDUE; COFFEE; TEA; EXTRACT; USEFUL; ORGANIC; MATERIAL; FERTILISER; SOIL; SUBSTITUTE; SOIL; IMPROVE; MATERIAL

Derwent Class: D16; E13

International Patent Class (Main): C12N-001/20

International Patent Class (Additional): C12N-001/00; C12N-001/38;

C12R-001-265; C12N-001/20

13/7,DE/5 (Item 5 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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013352332

WPI Acc No: 2000-524271/200047

A physiological food salt product containing an alkaline earth metal component

Patent Assignee: MAEKI J I T (MAEK-I); MODULPO SALTS OY (MODU-N)

Inventor: MAEKI J I T; MAEKI J

Number of Countries: 091 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200044245	A1	20000803	WO 2000FI18	A	20000112	200047	B
FI 9900145	A	20000728	FI 99145	A	19990127	200054	
AU 200021138	A	20000818	AU 200021138	A	20000112	200057	
EP 1150578	A1	20011107	EP 2000901170	A	20000112	200168	
			WO 2000FI18	A	20000112		
JP 2002534992	W	20021022	JP 2000595557	A	20000112	200301	
			WO 2000FI18	A	20000112		
FI 110474	B1	20030214	FI 99145	A	19990127	200320	

Priority Applications (No Type Date): FI 99145 A 19990127

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200044245 A1 E 30 A23L-001/237

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN
CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE
SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

FI 9900145 A A23L-001/237

AU 200021138 A A23L-001/237 Based on patent WO 200044245

EP 1150578 A1 E A23L-001/237 Based on patent WO 200044245

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
LI LT LU LV MC MK NL PT RO SE SI

JP 2002534992 W 31 A23L-001/237 Based on patent WO 200044245

FI 110474 B1 A23L-001/237 Previous Publ. patent FI 9900145

Abstract (Basic): WO 200044245 A1

Abstract (Basic):

NOVELTY - A physiological food salt product containing an alkaline earth metal component. The product contains one or more hydrate forms of magnesium ammonium chloride and / or calcium ammonium chloride.

DETAILED DESCRIPTION - A physiological food salt product containing an alkaline earth metal component. The product contains one or more hydrate forms of magnesium ammonium chloride and / or calcium ammonium chloride having the general formula $MNH_4Cl_3 \cdot xH_2O$.

M=Mg or Ca;

X=the number of molecules of water of crystallization.

INDEPENDENT CLAIMS are also included for:

(1) a nutrient substance, a semi-finished product, a processed food product, a food portion;

(2) a method for preparing a food salt product containing an alkaline earth metal component. The alkaline earth metal chloride and ammonium chloride are brought together in a solution form, in which a precipitate is formed which contains one or several hydrate forms of an alkaline earth metal ammonium having the above formula, and the obtained precipitate is separated from the mother liquor.

USE - For food salt product.

pp; 30 DwgNo 0/3

Title Terms: PHYSIOLOGICAL; FOOD; SALT; PRODUCT; CONTAIN; ALKALINE; EARTH; METAL; COMPONENT

Derwent Class: D13; E33

International Patent Class (Main): A23L-001/237

International Patent Class (Additional): A23L-001/304

13/7,DE/6 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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012934221

WPI Acc No: 2000-106068/200009

New method of production of potassium sulfate for use as fertilizer

Patent Assignee: AIRBORNE IND MINERALS INC (AIRB-N); ARISTOS CAPITAL CORP (ARIS-N)

Inventor: PHINNEY R

Number of Countries: 087 Number of Patents: 013

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9965823	A1	19991223	WO 99CA564	A	19990615	200009	B
AU 9942545	A	20000105	AU 9942545	A	19990615	200024	
ZA 9907696	A	20000927	ZA 997696	A	19991215	200056	N
BR 9910403	A	20010109	BR 9910403	A	19990615	200106	
			WO 99CA564	A	19990615		
NO 200005121	A	20010215	WO 99CA564	A	19990615	200123	
			NO 20005121	A	20001011		
EP 1094985	A1	20010502	EP 99957051	A	19990615	200125	
			WO 99CA564	A	19990615		
SK 200001545	A3	20010409	WO 99CA564	A	19990615	200131	
			SK 20001545	A	19990615		
CZ 200004624	A3	20010613	WO 99CA564	A	19990615	200138	
			CZ 20004624	A	19990615		
CN 1299337	A	20010613	CN 99805683	A	19990615	200158	
KR 2001034850	A	20010425	KR 2000712544	A	20001109	200164	
US 6315976	B1	20011113	US 9889630	P	19980616	200173	
			US 99332500	A	19990614		
HU 200101399	A2	20011228	WO 99CA564	A	19990615	200216	
			HU 20011399	A	19990615		
JP 2002518281	W	20020625	WO 99CA564	A	19990615	200243	
			JP 2000554656	A	19990615		

Priority Applications (No Type Date): US 9889630 P 19980616; ZA 997696 A 19991215; US 99332500 A 19990614

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 9965823	A1	E	18	C01D-005/08	
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Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW

AU 9942545	A			C01D-005/08	Based on patent WO 9965823
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ZA 9907696	A		16	C01D-000/00	
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BR 9910403	A			C01D-005/08	Based on patent WO 9965823
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NO 200005121	A			C01D-000/00	
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EP 1094985	A1	E		C01D-005/08	Based on patent WO 9965823
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Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC MK NL PT SE

SK 200001545	A3			C01D-005/08	Based on patent WO 9965823
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CZ 200004624	A3			C01D-005/08	Based on patent WO 9965823
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CN 1299337	A			C01D-005/08	
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KR 2001034850	A			C01D-005/08	
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US 6315976	B1			C01D-005/00	Provisional application US 9889630
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HU 200101399	A2			C01D-005/08	Based on patent WO 9965823
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JP 2002518281	W		19	C01D-005/08	Based on patent WO 9965823
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Abstract (Basic): WO 9965823 A1

Abstract (Basic):

NOVELTY - Production method of potassium sulfate from an ammonium sulfate-containing source is new.

DETAILED DESCRIPTION - Production of potassium sulfate from an ammonium sulfate-containing source comprises:

(i) contacting potassium chloride and ammonium sulfate in a mixer at 20-40 degreesC;

(ii) precipitating a first precipitate of double salt in a filtrate;

(iii) mixing the filtrate with potassium chloride;

(iv) generating a second filtrate containing ammonium and potassium chloride and a second precipitate of double salt;

(v) mixing the second double salt precipitate with the first precipitate in a solution of potassium chloride;

(vi) precipitating a third precipitate of potassium sulfate and a third filtrate;

(vii) recirculating the third filtrate into the mixing step (iii);

(viii) mixing the second filtrate in a mixing tank at below 70 degreesC in a solution of less than 10 wt.% sodium chloride, calcium chloride and sodium sulfate; and

(ix) generating a syngenite precipitate and a fourth filtrate.

USE - Potassium sulfate is useful in analytical chemistry, cement mixes and as fertilizer for chloride-sensitive crops such as citrus and tobacco crops, as well as in the manufacture of glass, alum and as a food additive.

ADVANTAGE - The process gives pure potassium sulfate from brines of ammonium sulfate with up to 12% Na₂SO₄ impurities. It avoids the use of acids, high energy input or other such unit operations. Recovery of sulfate and potassium is in excess of 95% completely in the absence of evaporation. Costs are reduced.

pp; 18 DwgNo 0/2

Title Terms: NEW; METHOD; PRODUCE; POTASSIUM; SULPHATE; FERTILISER

Derwent Class: C04; E34

International Patent Class (Main): C01D-000/00; C01D-005/00; C01D-005/08

International Patent Class (Additional): C01C-001/02; C01F-011/18;

C01F-011/46

13/7,DE/7 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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008118315

WPI Acc No: 1990-005316/199001

Coolant - contains cpds. which are endothermic and water absorbing resin hydrate(s)

Patent Assignee: KASHIWA KAGAKU KOGYO KK (KASH-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 1289889	A	19891121	JP 88119747	A	19880517	199001 B

Priority Applications (No Type Date): JP 88119747 A 19880517

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 1289889	A		4		

Abstract (Basic): JP 1289889 A

A coolant comprises (A) one or more cpds. which are endothermic when water is added and (B) one or more water-absorbing resin hydrates.

(A) may be selected from endothermic cpds. AgSCN, H₃BO₃, NH₄Cl, NH₄HCO₃, NH₄N₃, NH₄NO₂, NH₄NO₃, NH₄OCN, (NH₄)₃PO₄.3H₂O, NH₄SCN, Na₂B₄O₇.10H₂O, Na₂HPO₄.12H₂O, 1-aspartic acid, salicyclic acid, oxalic acid.2H₂O, guanidine nitrate, urea borate, sodium borate, sodium nitrite, urea, ammonium carbamate, ammonium carbonate, calcium nitrate, crystalline calcium chloride, magnesium sulfate, potassium thicyanate. (B) is prepd. by blending water and a water-absorbing resin e.g. mannane, galactane, gelatin, casein, cholagen, starch, cellulose, polyvinyl alcohol, polyacrylic acid, maleic acid polymer.

USE/ADVANTAGE - Usable for cooling foods or cooling fever patients.
0/1

Title Terms: COOLANT; CONTAIN; COMPOUND; ENDOTHERMIC; WATER; ABSORB; RESIN;
HYDRATE

Derwent Class: A97; D22; G04; P32

International Patent Class (Additional): A61F-007/10; C09K-005/00

?t s14/ti/all

14/TI/1 (Item 1 from file: 5)

DIALOG(R)File 5:(c) 2003 BIOSIS. All rts. reserv.

Surimi of fish species from the Gulf of Mexico: Evaluation of the setting
phenomenon.

14/TI/2 (Item 2 from file: 5)

DIALOG(R)File 5:(c) 2003 BIOSIS. All rts. reserv.

Palatable anionic feed mineral concentrate.

14/TI/3 (Item 3 from file: 5)

DIALOG(R)File 5:(c) 2003 BIOSIS. All rts. reserv.

A-w values of six saturated salt solutions at 25 C. Re-examination for the
purpose of maintaining a constant relative humidity in water sorption
measurements.

14/TI/4 (Item 1 from file: 10)

DIALOG(R)File 10:(c) format only 2003 The Dialog Corporation. All rts.
reserv.

Porcine plasma proteins as gel enhancer in bigeye snapper (*Priacanthus*
tayenus) surimi

14/TI/5 (Item 2 from file: 10)

DIALOG(R)File 10:(c) format only 2003 The Dialog Corporation. All rts.
reserv.

The roles of inorganic nitrogen salts in maintaining phytochrome- and
gibberellin A3-mediated germination control in skotodormant lettuce seeds

14/TI/6 (Item 3 from file: 10)

DIALOG(R)File 10:(c) format only 2003 The Dialog Corporation. All rts.
reserv.

Voluntary intake of calcium and other minerals by rats

14/TI/7 (Item 1 from file: 51)

DIALOG(R)File 51:(c) 2003 FSTA IFIS Publishing. All rts. reserv.

(Germination of spores of *Clostridium* species capable of causing food
poisoning. V. Ionic germination of spores of some heat-sensitive strains of
Cl. perfringens Type A.)

14/TI/8 (Item 1 from file: 53)
DIALOG(R)File 53:(c) 2003 LFRA. All rts. reserv.

Water activity values of six saturated salt solutions at 25 C.
Re-examination for the purpose of maintaining a constant relative humidity in water sorption measurements.

14/TI/9 (Item 1 from file: 94)
DIALOG(R)File 94:(c)2003 Japan Science and Tech Corp(JST). All rts. reserv.

Effect of Freeze Concentration of Various Salt Solutions on the Denaturation of Carp Myofibrils.

14/TI/10 (Item 1 from file: 347)
DIALOG(R)File 347:(c) 2003 JPO & JAPIO. All rts. reserv.

PACKAGING MATERIAL

14/TI/11 (Item 1 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

New piperidine derivatives useful in the treatment of chemokine mediated disease e.g. rhinitis

14/TI/12 (Item 2 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

Removal of contaminants from waste water, involves coagulating contaminants into particulate, passing treated water through micro-filtration membrane at specific conditions, and back-flushing membrane to remove solids

14/TI/13 (Item 3 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

Process for producing non-toxic liquid noncombustible agent

14/TI/14 (Item 4 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

Manufacture of 2,6-dimethyl-5,6-epoxyocta-2,7-diene useful for imparting fragrance, flavor and appetizing taste comprises Grignard's reagent reaction and epoxidation

14/TI/15 (Item 5 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

Preparation of 6-methyl-4,6-heptadiene-2-one, used as fragrance and flavor for foods, perfumes and cosmetics, involves isomerization of 6-methyl-3,5-heptadiene-2-one using a base

14/TI/16 (Item 6 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

New 7-amino-2-alkylthiopteridin-4-yl-amine compounds useful for treating chemokine mediated disease, particularly inflammatory diseases e.g. psoriasis and rheumatoid arthritis

14/TI/17 (Item 7 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

Modified copra meal production for fodder with antibacterial effect by treating copra meal with mannanase in presence of salts

14/TI/18 (Item 8 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

Implement for use as e.g. cleaning wipes, is made from high internal phase emulsion foam comprising a vinyl polymer and has a two or three dimensional structure

14/TI/19 (Item 9 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

Carrier for culturing microorganisms comprises trace elements, inorganic salts and a polymer on an inorganic porous support

14/TI/20 (Item 10 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

New metallocene compounds used in production of olefin polymerization catalysts having high activity for producing isotactic polymers, e.g. polypropylene

14/TI/21 (Item 11 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

Treating obesity by administration of a benzopyran derivative or selective estrogen receptor modulator with steroids

14/TI/22 (Item 12 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

Preparation of palatable anionic mineral feed concentrate granules useful for the prevention of parturient paresis in commercial breeding animals

14/TI/23 (Item 13 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

Detergent composition useful in cleaning/softening fabric, dishware and/or hard surfaces comprises a pectate lyase enzyme and a cationic surfactant

14/TI/24 (Item 14 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

Hair composition for curl relaxation comprises a thiosulfate compound, an acidifier and a catalyst

14/TI/25 (Item 15 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

Additive composition useful in water-based fluids, e.g. drilling fluids, metal working fluids and foods, comprises polymer, calcium chloride and water

14/TI/26 (Item 16 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

Prepn. of alcoholic beverage - by using gel-coated immobilised yeast to control diacetyl prodn.

14/TI/27 (Item 17 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

Removing contaminants from waste water - by forming amorphous magnesium silicate in situ by separate addn. of magnesium chloride and sodium silicate

14/TI/28 (Item 18 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

Cooling agent for food, drink and feverish patients - is obtd. by separately packaging endothermic powder which absorbs heat on dissolving in water and swollen water absorbing polymer

14/TI/29 (Item 19 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

Mfg. milt food of increased protein coagulation - by adding buffer to milt, then adding edible salts and heating

14/TI/30 (Item 20 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

Perfume compsn. with apple fragrance - contg. trans or cis 5-octene-1-ol, used in foods, cosmetics, sanitary prods., deodorants etc.

14/TI/31 (Item 21 from file: 350)
DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

Large dia. tubular cellulosic food casing - contg. specified chloride(s) to inhibit propagation of moulds etc.

14/TI/32 (Item 22 from file: 350)

DIALOG(R)File 350:(c) 2003 Thomson Derwent. All rts. reserv.

Acetaldehyde carbohydrate complex as food flavour - - prepd by freeze drying

?pause

?t s14/7,de/2,22,26,29,31,32

14/7,DE/2 (Item 2 from file: 5)

DIALOG(R)File 5:BIOSIS Previews(R)

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13014695 BIOSIS NO.: 200100221844

Palatable anionic feed mineral concentrate.

AUTHOR: Moore William P

JOURNAL: Official Gazette of the United States Patent and Trademark Office
Patents 1238 (3):pNo Pagination Sep. 19, 2000

MEDIUM: e-file

ISSN: 0098-1133

DOCUMENT TYPE: Patent

RECORD TYPE: Abstract

LANGUAGE: English

ABSTRACT: A four step method of preparing palatable anionic mineral feed concentrate granules which form storage stable blends with feed rations to prevent parturient paresis in commercial breeding animals, with the four steps comprising: metathetically reacting ammonium sulfate with a molecular excess of magnesium chloride in acidic water to form an ammonium chloride, magnesium sulfate, magnesium chloride anionic salt solution; mixing the anionic solution with comestible proteinaceous feed particles to form damp concentrate particles; mixing the damp concentrate particles with a palatability enhancing molasses binder to form damp concentrate granules; and, drying the granules to form dry palatable anionic feed mineral concentrate granules which exhibit an excess of the strong anions, chloride and sulfate, over the strong cations, sodium and potassium. The attrition resistant granular concentrate composition may be effectively blended with animal feeds to form storage stable feed rations for commercial breeding animals for preventing parturient paresis.

DESCRIPTORS:

MAJOR CONCEPTS: Animal Husbandry (Agriculture); Foods

DISEASES: parturient paresis--nervous system disease, prevention

MISCELLANEOUS TERMS: anionic feed mineral concentrate--food supplement, palatable; stable feed rations

2000

14/7,DE/22 (Item 12 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

013414833

WPI Acc No: 2000-586771/200055

Preparation of palatable anionic mineral feed concentrate granules useful for the prevention of parturient paresis in commercial breeding animals

Patent Assignee: AGRINUTRIENTS TECHNOLOGY GROUP INC (AGRI-N)

Inventor: MOORE W P

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
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US 6120815 A 20000919 US 99429706 A 19991029 200055 B

Priority Applications (No Type Date): US 99429706 A 19991029

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 6120815 A 7 A23K-001/175

Abstract (Basic): US 6120815 A

Abstract (Basic):

NOVELTY - A metathetical reaction of ammonium sulfate with a molecular excess of alkaline earth chloride, allowing the anionic salt solution formed to remain liquid at low temperatures and low water concentrations, forming a product containing proteinaceous particles which would neither settle out of a feed ration nor be brushed aside by a consuming animal

DETAILED DESCRIPTION - A 4-step method for preparing anionic mineral feed concentrate granules, which form storage stable blends with feed rations, for the prevention of parturient paresis in commercial breeding animals, comprises:

(a) metathetically reacting ammonium sulfate with a molecular excess of magnesium chloride and/or calcium chloride, to form an aqueous anionic salt solution comprising alkaline earth sulfate, ammonium chloride and unreacted alkaline earth chloride;

(b) admixing 1 part of this with 1-4 parts of comestible proteinaceous particles until it is absorbed to form damp particles exhibiting 15-30% moisture content;

(c) admixing 1-8% of palatability-enhancing molasses granule binder relative to the granular product, with the damp particles until they are bound together as damp granules; and

(d) drying them to a moisture content of 3-15% at 60-100 degreesC in less than 15 minutes.

An INDEPENDENT CLAIM is also included for a caramelization-free anionic mineral feed concentrate granule composition which forms storage stable blends with feed rations, effective for feeding to breeding cows to prevent parturient paresis.

USE - The product is useful for the prevention of parturient paresis in commercial breeding animals, e.g. for feeding to breeding cows.

ADVANTAGE - An attrition-resistant granular concentrate composition may be effectively blended with animal feeds to form storage-stable feed rations.

pp; 7 DwgNo 0/0

Title Terms: PREPARATION; PALATE; ANION; MINERAL; FEED; CONCENTRATE; GRANULE; USEFUL; PREVENT; PARESIS; COMMERCIAL; BREEDER; ANIMAL

Derwent Class: D13

International Patent Class (Main): A23K-001/175

14/7,DE/26 (Item 16 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

010000961

WPI Acc No: 1994-268672/199433

Prepn. of alcoholic beverage - by using gel-coated immobilised yeast to control diacetyl prodn.

Patent Assignee: SAPPORO BREWERIES (SAPB)

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
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JP 6197749	A	19940719	JP 92358798	A	19921228	199433	B
JP 3346811	B2	20021118	JP 92358798	A	19921228	200279	

Priority Applications (No Type Date): JP 92358798 A 19921228

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 6197749	A		4	C12C-011/02	
JP 3346811	B2		3	C12C-011/02	Previous Publ. patent JP 6197749

Abstract (Basic): JP 6197749 A

The prepn. of alcoholic beverage uses gel-coated immobilised yeast.

The double-immobilised yeast is pref. prepd. by dropping a mixed suspension comprising yeast and an aq. soln. of a gelling material from the inner tube of a double-tube nozzle and an aq. soln. of a gelling material from the outer tube of the nozzle, to a gelling agent, to gel in order to form another gel layer on the yeast-immobilising gel. The gelling materials include sodium alginate, pectin, chitosan, carrageenan, agar and gelatin. The gelling agents are calcium-, strontium-, barium-, aluminium-, and iron ((II) or (III)) chloride, for sodium alginate, and pectin, sodium (hexa)meta- or poly-phosphate and tricalcium phosphate for chitosan, potassium chloride, calcium chloride and ammonium chloride for carrageenan and cold water and cold oil for agar and gelatin. The material is malt, fruit juice, sugar liq. and saccharified grain liq. The yeast is a *Saccharomyces* strain.

USE/ADVANTAGE - The method ensures efficient continuous prodn. of the beverage of stable flavour, such as beer, sake (Japanese liquor) and wines, in a short time. The formation of diacetyls is controlled.

In an example, a double-immobilised yeast was added to malt of a sugar number of 11 deg,P and fermented at 13 deg.C for 48 hr. After completion of fermentation, the total diacetyl content was 0.16 mg/l or lower. The prod. had an ethanol concn. of 3/6 w/w%, without yeast release.

Dwg.0/2

Title Terms: PREPARATION; ALCOHOLIC; BEVERAGE; GEL; COATING; IMMOBILISE; YEAST; CONTROL; DI; ACETYL; PRODUCE

Derwent Class: D16

International Patent Class (Main): C12C-011/02

International Patent Class (Additional): C12G-003/02; C12N-011/04

14/7,DE/29 (Item 19 from file: 350)
 DIALOG(R)File 350:Derwent WPIX
 (c) 2003 Thomson Derwent. All rts. reserv.

004040771

WPI Acc No: 1984-186313/198430

Mfg. milt food of increased protein coagulation - by adding buffer to milt, then adding edible salts and heating

Patent Assignee: NICHIRO GYOGYO KK (NIGY)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 59106270	A	19840619	JP 82217584	A	19821211	198430 B

Priority Applications (No Type Date): JP 82217584 A 19821211

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 59106270	A		3		

Abstract (Basic): JP 59106270 A

Prodn. of milt food (I) comprises adding edible salt(s) (II) to milt (III) and then coagulating (III) by heating. (III) is pretreated by adding buffer soln. (IV) to adjust its pH to 7.5-9.0.

(II) is e.g. neutral salt such as NaCl, KCl, CaCl₂, MgCl₂, MgSO₄, sodium glutamate, sodium ascorbate, sodium tartrate, and sodium lactate or alkaline salt such as Na₂CO₃, NaHCO₃, NaH₂PO₄, Na₃PO₄, potassium pyrophosphate, K₂CO₃, K₃PO₄, disodium succinate, sodium citrate and sodium acetate. (III) is e.g. of salmon, herring, trout or sand fish.

(IV) is e.g. 0.1 M glycine - 0.1 M NaCl - 0.1 N KOH, 0.1 M NH₄Cl - 0.1 N aq. ammonia or 1/15 M KH₂PO₄ - 1/15 M Na₂HPO₄. Heating of (III) is at ca. 100-130 deg.C.

ADVANTAGE - (I) shows increased coagulation of milt protein, has a reduced salt concn., and has textures suiting consumer tastes.

Title Terms: MANUFACTURE; MILT; FOOD; INCREASE; PROTEIN; COAGULATE; ADD; BUFFER; MILT; ADD; EDIBLE; SALT; HEAT

Derwent Class: D13

International Patent Class (Additional): A23L-001/32

14/7,DE/31 (Item 21 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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003211214

WPI Acc No: 1981-71769D/198140

Large dia. tubular cellulosic food casing - contg. specified chloride(s) to inhibit propagation of moulds etc.

Patent Assignee: UNION CARBIDE CORP (UNIC)

Inventor: ELLIS D E; HIGGINS T E

Number of Countries: 016 Number of Patents: 017

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
BE 887928	A	19810914				198140	B
BR 8101410	A	19810915				198140	
GB 2071988	A	19810930				198140	
FR 2477840	A	19810918				198143	
NL 8101211	A	19811001				198144	
NO 8100829	A	19811005				198144	
SE 8101504	A	19811012				198144	
DK 8101131	A	19811026				198147	
FI 8100758	A	19811030				198147	
JP 56169541	A	19811226				198206	
DE 3109336	A	19820304				198210	
ZA 8101554	A	19820215				198217	
GB 2071988	B	19831116				198346	
CA 1170494	A	19840710				198432	
AT 8101145	A	19840915				198442	
CH 654268	A	19860214				198612	
IT 1194768	B	19880928				199107	

Priority Applications (No Type Date): US 80130190 A 19800313

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
BE 887928	A		35		

Abstract (Basic): BE 887928 A

The casing, previously moistened to a degree such that it does not require further moistening before being filled, contains NaCl, KCl, CaCl₂, NH₄ Cl or MgCl₂ in a consn. such that the water activity of the casing is maintained at a value not above 0.81. Mfr. of the casing

comprises adding water to establish a 20-40% moisture content and 2-22.6% NaCl, 2.6-68.7% KCl, 4.1-35.9 CaCl₂, 3.1-33.2 NH₄Cl and 2.9-22% MgCl₂, based on the cellulose.

Used for salamis, Cologne sausages etc. the use of the salts both avoids the need for further moistening and also inhibits the propagation of moulds, yeasts and bacteria.

Title Terms: DIAMETER; TUBE; CELLULOSIC; FOOD; CASING; CONTAIN; SPECIFIED; CHLORIDE; INHIBIT; PROPAGATE; MOULD

Derwent Class: D12; P43; Q32; Q34

International Patent Class (Additional): A22C-013/00; A23B-004/00; A23C-019/14; A23L-001/31; A23L-003/34; A23P-001/08; B08B-013/00; B65D-065/38

14/7,DE/32 (Item 22 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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000842294

WPI Acc No: 1972-02244T/197202

Acetaldehyde carbohydrate complex as food flavour - - prepd by freeze drying

Patent Assignee: GENERAL FOODS CORP (GENO)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 3625709	A					197202 B

Priority Applications (No Type Date): US 69800246 A 19690218

Abstract (Basic): US 3625709 A

H₂O is mixed with CH₃CHO, a carbohydrate that is a hydrophilic colloid not having free NH₂, H₂O-dispersible dextrans, partially hydrolyzed starches and/or sugars, and a catalyst, pref. NH₄Cl, NaCl or CaCl₂. The mixture is frozen and then dried, by freeze drying or vacuum oven drying, so that the CH₃ CH₃ becomes complexed with the carbohydrate. The complex is used as a food flavouring and aroma enhancer. It has the advantage that it has superior room temp. stability over wide ranges of ambient humidities.

Title Terms: ACETALDEHYDE; CARBOHYDRATE; COMPLEX; FOOD; FLAVOUR; PREPARATION; FREEZE; DRY

Derwent Class: D13

International Patent Class (Additional): A23L-001/22